



DRAFT

Town of Loomis  
***BICYCLE***  
***TRANSPORTATION***  
***PLAN - 2009***







# ***Town of Loomis BICYCLE TRANSPORTATION PLAN - 2009***

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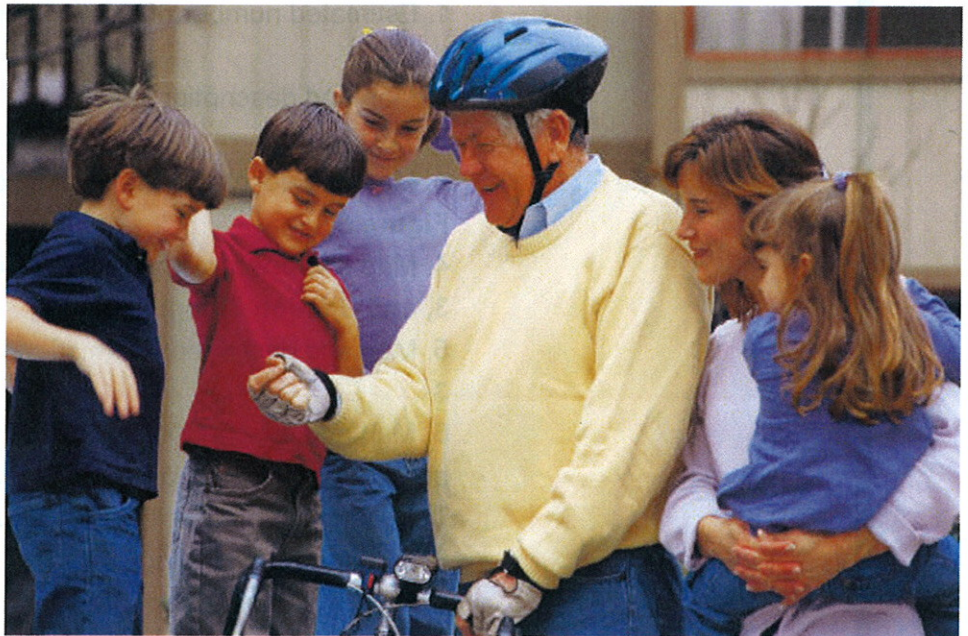
# Introduction 1

## A. PURPOSE AND NEED

This Bicycle Transportation Plan (BTP) has been developed by the Town of Loomis in an effort to encourage the enhancement of Town of Loomis's local and regional bikeways network, in order to make local and recreational bicycle travel safe and fun for all and make bicycle commuting a more viable and attractive travel option.

The current Bikeway Master Plan, adopted in 2003, was prepared for the Town

*The intent of this plan is to provide the long term framework to improve and encourage bicycle transportation in the Town.*



of Loomis by the Placer County Transportation Agency. Since that time, the Town of Loomis has noted the need to better document the existing conditions of the Town's bikeway system and prepare a more comprehensive BTP to guide its policies associated with bikeways. The goal of the BTP is to help address these many challenges by providing:

- Documentation of existing and planned Town of Loomis bikeways
- A strategy for improving the Town's bikeway network;
- Identification of potential costs and prioritization of improvements
- Eligibility for state Bicycle Transportation Account (BTA) funds







# Introduction

## *Bicycle Transportation Act Requirements*

The Bicycle Transportation Act requires that local agencies complete a Bicycle Transportation Plan in order to qualify for grant funds issued by the California Department of Transportation through the Bicycle Transportation Account. The Bicycle Transportation Act requires that Bicycle Transportation Plans contain at a minimum eleven key elements. The following list indicates the minimum required elements and the sections in this document where the information can be located.

1. Estimated number of existing and future bicycle commuters **Section 2.C**
2. Map and description of land use and settlement patterns **Section 2.B & Figure 1**
3. Map and description of existing and proposed bikeways **Section 3, Figure 5**
4. Map and description of bicycle parking facilities **Section 2, Figure 3, and Section 3, Figure 5.**
5. Map and description of multi-modal connections **Section 2, Figure 3**
6. Map and description of facilities for changing and storing clothes and equipment **Section 2, Figure 3**
7. Description of bicycle safety and education programs **Section 3, Education** (subheading)
8. Description of citizen and community participation **Section 2.C**
9. Description of consistency with transportation, air quality, and energy conservation plans **Section 2.A**
10. Description of proposed bicycle projects and implementation priority **Section 4.**
11. Description of past expenditures and future financial needs for bicycle facilities **Section 4.**

The Bicycle Transportation Act further requires that Bicycle Transportation Plans be updated every 4-years. The Town of Loomis last updated their "Bike Master Plan" Document in 2003.

## **B. Setting**

The Town of Loomis is located in the County of Placer, approximately 30-minutes north of the City of Sacramento. Located just off of the I-80 corridor







# Introduction

and along Historic US Highway 40, the town was once a thriving agricultural community supporting surrounding orchards. The Town's population is approximately 6,200 people. Although there are employment opportunities in the Town, the majority of workers commute to other destinations in Placer and Sacramento Counties. The Town enjoys a "small town" atmosphere with a central business district located along Taylor Road Historic US 40, (a major arterial running southeast to northeast). An existing network of roadways converge on the downtown area from North, South, East and West establishing a core area at the heart of Loomis. Most current local bicycle travel is by students traveling to and from school and commercial areas, and by other residents for recreational travel and exercise. Additionally, this network of roads also connects to other areas in both Placer and Sacramento Counties. Consequently, many bicycle enthusiasts ride the Town's network of roadways as they partake in organized or recreational rides originating in areas outside of Loomis.



***Public meetings  
were held to solicit  
community input  
regarding routes,  
and improvements.***

The topography of the area is relatively flat except for some rolling hills and a network of creeks flowing from the foothills of the Sierra Nevada. The relative flatness of the roadways provide an easy bicycle ride for all levels of riding experience. However, many of the Town's roadways are very narrow, and are constrained by slope conditions to either side, rock outcrops, and tree vegetation deemed important by the local population.

## **C. Public Participation**

In preparing this document, the Town solicited public input on existing bicycling conditions, potential roadways for improvements, crossing locations, and the type of support facilities or programs needed to improve bicycling in the Town of Loomis. The process relied on:

- Tour on bicycles of all of the roadways, that involved two members of the consultant team and the Town Engineer.
- Gathering input at two community meetings that invited residents of the community, bicycle club members from throughout the region, and city officials.
- Information gathered from a survey distributed to meeting attendees and on-line via the Town's website.
- The BTP team also met with members of the Open Space committee to





# Introduction

solicit their input regarding the overlap of bike and trail improvements in proposed open space areas of the Town.

- Staff interviews with members of the City staff responsible for bikeway implementation.
- Public Hearings with the City Council.

The following is a summary of responses received via the survey and in the public meetings:

- Sensors on bike lanes for traffic lights.
- Better routes for all!
- Bike parking (racks)
- Connect the north area of Loomis on Taylor road w/paths into downtown
- Connect bike lanes/maintain bike lanes:pavement, lines/markings, sweep weekly, trim low trees, signage
- Improve King Road bike lane E/W
- Add bike lane to Taylor south of Sierra College
- Safe connected routes to key destinations
- Proper signs and stripes to alert motorists
- Better pavement, clean streets
- Wide bike lanes on Barton, Rocklin Rd, Wells, Sierra College Blvd. multiple entry points
- Bikes lane in Sunrise Loomis
- Safe route to Raley's
- Bike riding events (fun things)
- Class 1 bikeways for fun
- Class 2 bikeways to downtown without removing natural resources.
- Sweep the streets once/twice a year
- Wider shoulders on roadways
- Laws that punish motorists for threatening cyclists
- Proper bike lanes with signage and bike storage
- Complete Taylor road, Class 2 and convinces Rocklin to connect and complete along Pacific.(4)
- Good signs "Bike Route" and arrows
- Trip traffic signals
- Good bike parking at businesses
- Website (see City of Roseville)
- More "share the road" signage and better bike lanes on busy roads
- Bike friendly controls for signals
- Paved shoulders, better bike lanes, and becoming a "bike friendly com-







# Introduction

munity” which will encourage our neighboring communities

- Bike lanes everywhere!
- Clearly marked bike lanes
- Maintained bike lanes

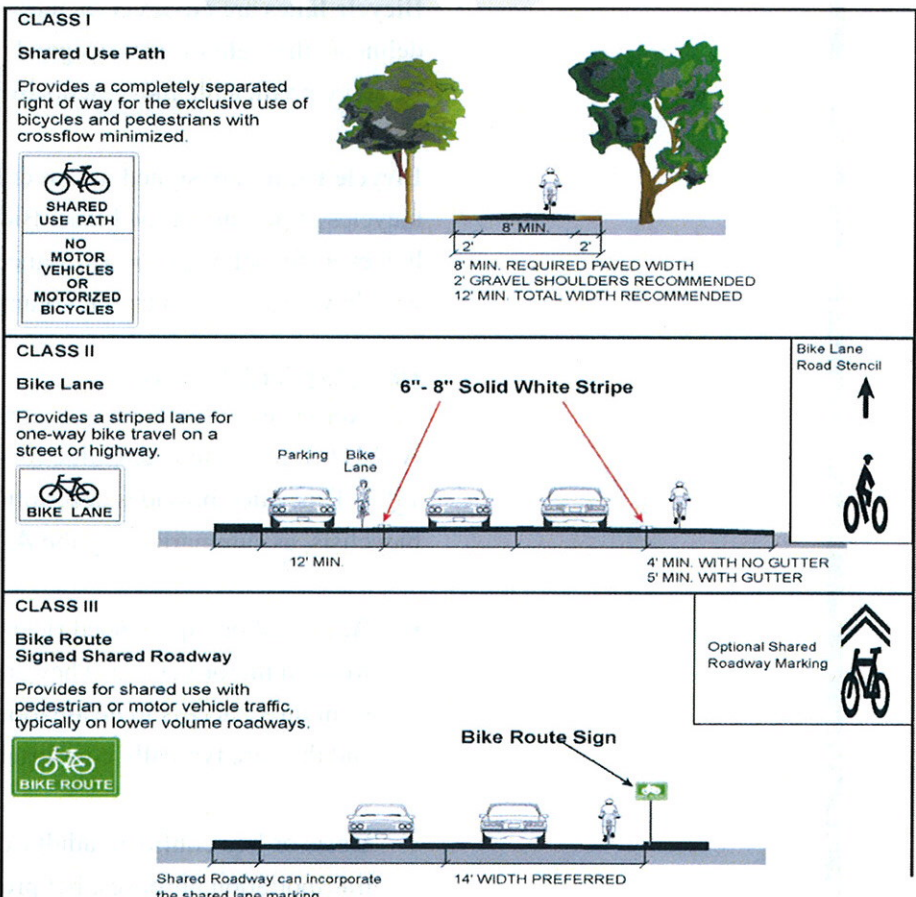
For more community input and response during the Public Participation involvement, see Appendix C and copies of the surveys available at the Town of Loomis Engineering Department.

## D. Bikeway Fundamentals

Bicycles are considered a vehicle, equivalent to automobiles, by the California Department of Transportation (Caltrans). However, while bicyclists share all the same rights and responsibilities of motorists, bicycle-specific facilities are often provided in an effort to enhance safety for both bicyclists and mo-



*The Town of Loomis Bicycle Transportation Plan proposes to improve bikeway conditions throughout the Town.*





# Introduction

torists. Bicyclists also need to be conscious of their skill and comfort levels when choosing their travel routes. The following sections provide a brief overview of the various classes of bikeways, and some general characteristics of the different skill levels of bicyclists.

## *Classes of Bikeways*

There are three classes of commuter bikeways:

- Class 1 – off-street paved bike paths
- Class 2 – on-road striped and signed bicycle lanes
- Class 3 – on-road shared-lane signed bicycle routes

**Off-street paths** are facilities on a separate right-of-way from roadways, and are usually shared by bicyclists and pedestrians. Shared paths are recreational facilities and should not be used as high-speed bikeways, as the safety of the other non-motorized users must be considered.

**Bicycle lanes** are on-street facilities that use painted stripes and stencils to delineate the right of way assigned to bicyclists and motorists, and to provide for more predictable movements by each.

**Bicycle routes** are signed on-street facilities that accommodate vehicles and bicycles in the same travel lane. Bicycles are permitted on most roadways; however, for safety purposes, signed bicycle routes are often found on streets with lower speeds and traffic volumes.

## *Bicyclist Skill Levels*

The American Association of State Highway and Transportation Officials, or AASHTO, published the Guide for the Development of Bicycle Facilities in 1999. This guide provides descriptions for the three general skill levels of bicyclists, as summarized by the **A, B, and C** typologies below:

- **A** Advanced or experienced riders are generally using their bicycles as they would a motor vehicle. They are riding for convenience and speed and want direct access to destinations with a minimum of detour or delay, and they are typically comfortable riding with motor vehicle traffic.
- **B** Basic or less confident adult riders may also be using their bicycles for transportation purposes, but prefer to avoid roads with fast and busy mo-







# Introduction

tor vehicle traffic unless there is ample roadway width to allow easy overtaking by faster motor vehicles.

- **Children**, who still require access to key destinations in their community, such as schools, convenience stores and recreational facilities. They prefer residential streets with low motor vehicle speeds, linked with shared-use paths and busier streets with well defined pavement markings between bicycles and motor vehicles, so they can avoid riding in the travel lane of major arterials.

The Town's intent is to provide opportunities to benefit all types of riders with an emphasis on the **Basic** and **Children** skill levels.





# Existing Conditions 2

## A. CONSISTENCY AND COORDINATION WITH OTHER PLANS

Consistency and coordination are provided through the integration of BTP throughout the elements of the General Plan. There are discussions regarding the encouragement of non-motorized modes of transportation. These include:

### From the General Plan, Page 48, Parks and Recreation, B. Bikeways and Trails

*Bikeways and trails are another means to meet the recreational needs of Town residents. The Town of Loomis has designated several bikeways and trails within the community, which are also part of the Placer County Bikeway System and Trails Master Plan. Currently, one bikeway has been developed in Loomis along King Road, and portions of Taylor Road. The County has designated four additional bikeways within Loomis, which remain unimproved.*



Image Source: www.peebikeimages.org - Photographer: Dan Burton

***The Town of Loomis recognizes the need to reduce congestion, increase circulation and improve air quality.***

*As noted above, Antelope Creek and Secret Ravine provide opportunities for open space corridors potentially providing hiking and equestrian trails. The creeks provide connections between the north and south areas of town, and to areas south of Loomis. The County has designated Secret Ravine as a Class 1 bicycle corridor in the regional bicycle transportation plan. The corridor is planned to extend from Loomis Basin Regional Park, west to the City of Roseville. This bikeway has not yet been improved. Secret Ravine has also been designated as an hiking and equestrian trail in the Loomis Basin Horsemen's Association Trails Master Plan and in other County planning documents. While no bikeways or trails have been designated along Antelope Creek, it is an important open space resource providing flood protection and significant riparian habitat value, and is also used as an informal hiking trail.*

.....and page 80:

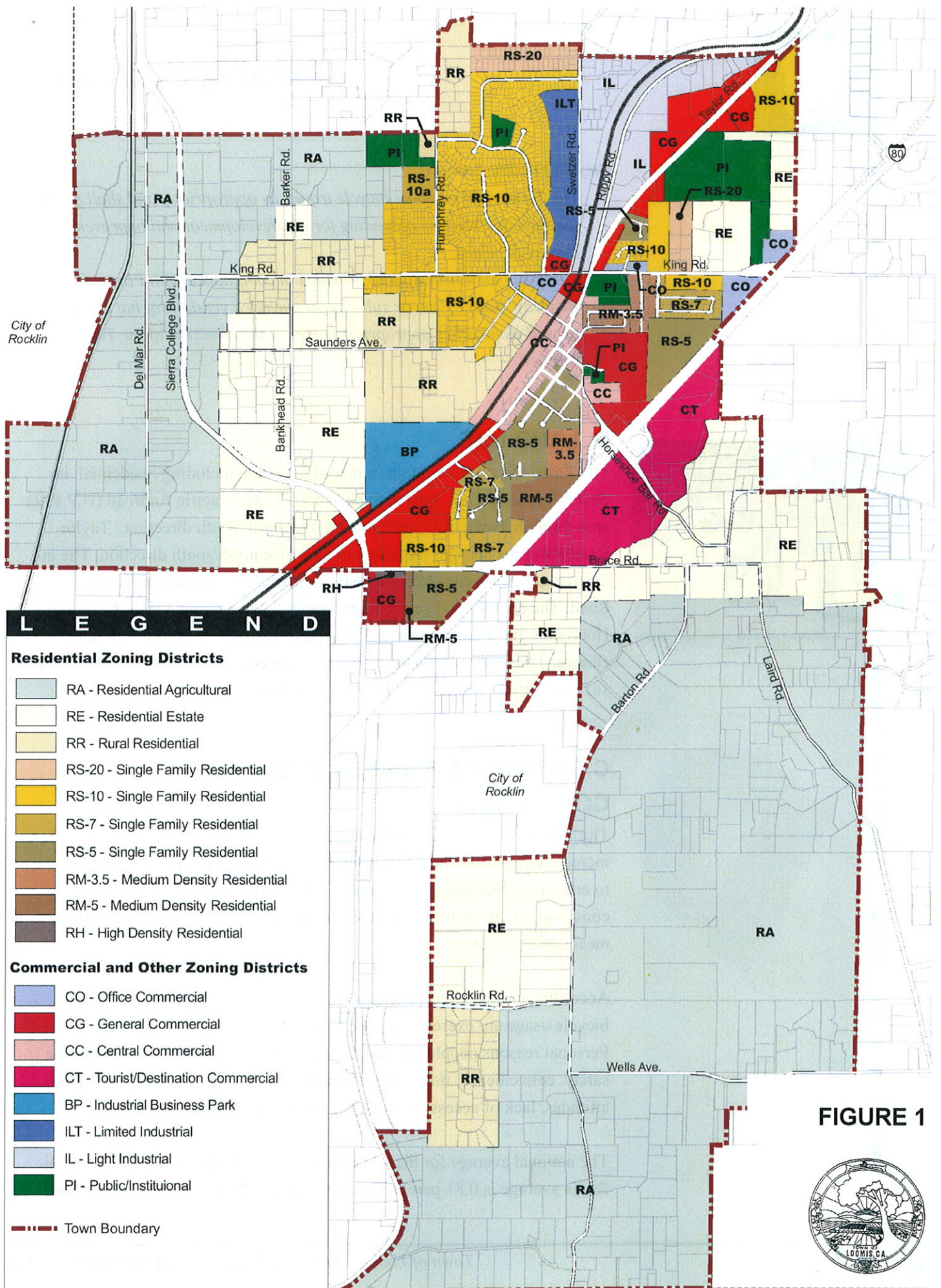
### *Bicycle Facilities*

*Issue: Bicycle Facilities are limited in Loomis. Provisions to increase bicycle use will provide recreational and mobility benefits to residents and reduce vehicular traffic.*

*Goal: To implement additional bicycle facilities that result in increased bicycle usage.*







**FIGURE 1**







# Existing Conditions

## *Bicycle Facility Policies:*

1. *The Town shall promote bicycle travel, as appropriate, and shall pursue all available sources of funding for the development and improvement of bicycle facilities.*
2. *Bicycle facilities shall be provided in compliance with Placer County Bikeway Master Plan or subsequent amended versions of that document, as well as on other appropriate routes at the direction of the Town Council*



Image Source: www.pedbikeimages.org - Photographer: Dan Burton

## **B. LAND USE**

The Town of Loomis contains a mix of land uses including residential, industrial, commercial. Interstate 80 and the Union Pacific Railroad (U.P.R.R.) pass through Town of Loomis in a relative north/south direction. Taylor Road also runs through the Town in a relative north/south direction. The industrial zones are concentrated near or around the railroad tracks and Taylor Road. The commercial zones are primarily located along Taylor Road and Horseshoe Bar Road and around the Horseshoe Bar / I-80 freeway interchange. The remainder of the Town land use consists of low to medium density residential. See **Figure 1** for a Town Zoning map.

## **C. ESTIMATED NUMBER OF BICYCLE COMMUTERS**

The Town of Loomis General Plan recognizes the need to reduce congestion, increase circulation and improve air quality. One way to achieve this goal is to encourage bicycling for reasons of traffic congestion reduction, energy conservation, air quality, health, economy, enjoyment, and as an alternate means of commuting.

According to the Federal Highway Administration, incentives motivating bicycle usage are exercise, enjoyment, traffic and environmental concerns. Personal reasons people give for choosing not to bicycle include: distance, safety, convenience, time, physical condition, family circumstances, habits, attitudes, lack of access and linkage, and transportation alternatives.

The national average for bicycle commuters is 0.44 percent, while the California average is 0.81 percent, according to the 2000 Census. Per the 2001







# Existing Conditions

California Budget Act report: “California Blue Print for Bicycling and Walking”, the State has a goal of increasing bicycling and walking trips by 50% by 2010. According to the 2000 Census, approximately 3,000 people commuted to work in the Town of Loomis. Of those identified, (48) were noted to use “other means” besides, car, transit, or walking. It can be assumed that “other means” included bicycle transportation. Of the (20) plus responders to the bike survey distributed prior to preparing this document, only (4) noted that they currently commute to work via bicycle. Only one respondent with school age children noted that they allow their child to ride a bike to school.



The survey noted that many of the parents, and citizens of Loomis in general, believe that the lack of safe bike facilities influenced their decision to bike in the Town of Loomis. However, the survey also noted that many of the respondents said they would consider biking more if the streets and sidewalks were safer and more accommodating to bikes.

Although impossible to measure without ongoing study, it is anticipated that bicycle ridership in the Town of Loomis could significantly increase if many of the improvements, recommended later in this document, are implemented.

*A Class 1 Bikeway completely separates the bicycle from automobiles.*

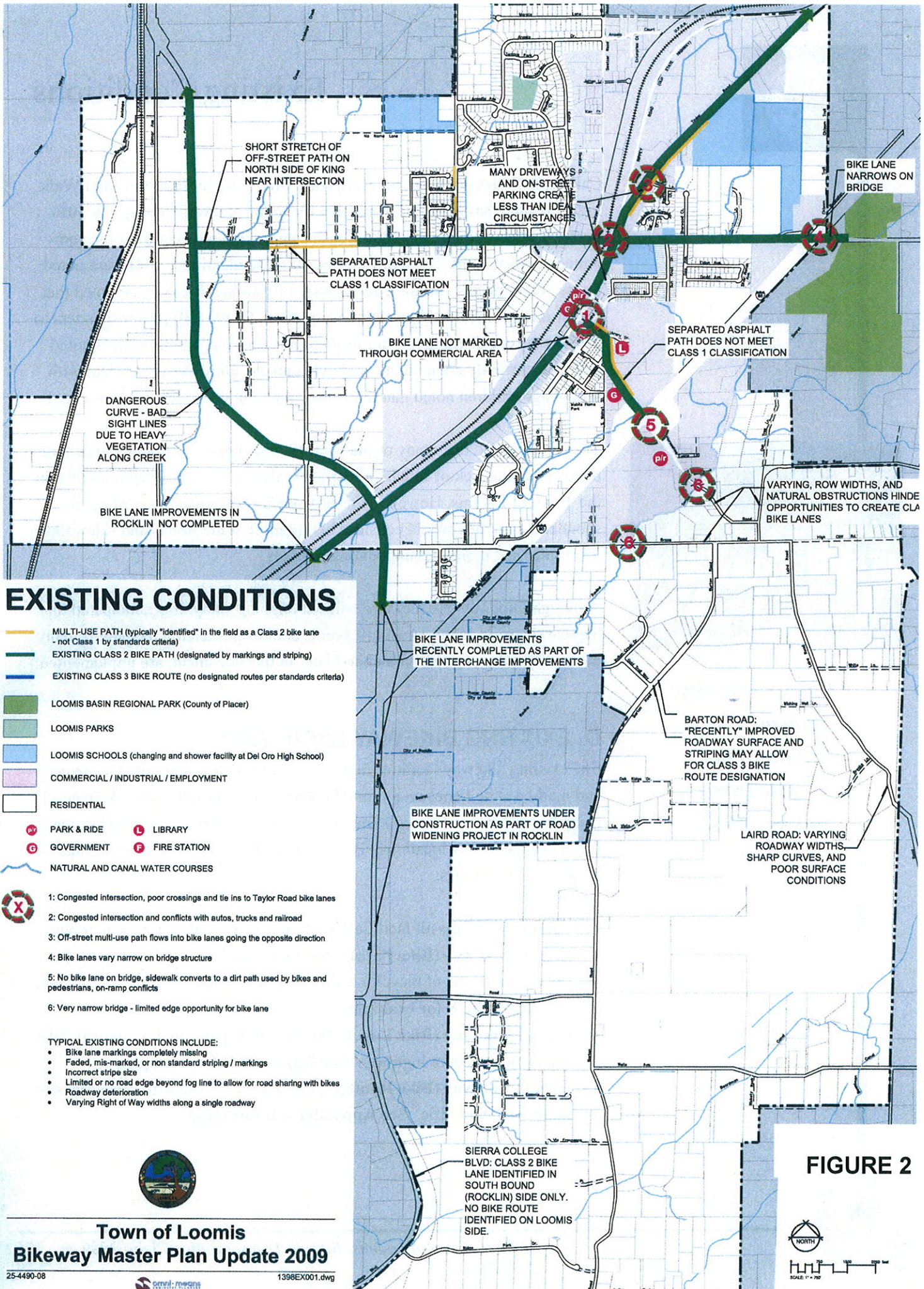
## D. EXISTING BIKEWAY FACILITIES

The existing bikeway facilities in the Town of Loomis are limited to striped and marked Bike Lanes on a limited number of roads. Of these bike lanes, many were witnessed to be in need of re-striping and marking. See **Figure 2** for existing bikeway locations. Bikeways are listed by Class 1, 2 or 3 and are defined as follows:

- “Bikeway” means all facilities that primarily provide for bicycle travel.
- **Class 1 Bikeway (Bike Path).** Provides completely separated path for the exclusive use of bicycles and pedestrians with cross-flow minimized. See **Appendix B** for example.
- **Class 2 Bikeway (Bike Lane).** Provides a striped lane for one-way bike travel on a street or highway. See **Appendix B** for example.
- **Class 3 Bikeway (Bike Route).** Provides shared use with pedestrians or motor vehicle traffic. See **Appendix B** for example.











# Existing Conditions

The Town of Loomis currently has:

- Zero miles of existing Class 1 Bikeways
- 6.5 miles of existing Class 2 Bikeways
- Zero miles of existing Class 3 Bikeways



***Bike racks located at key areas around the Town will encourage riders to those locations.***

The surrounding County and Town of Loomis offer bicyclists numerous options for enjoyable picturesque bike rides for on or off-road riding. Many of the County's remote roads, offer beautiful rides through oak or pine forests, often with views of distant snow covered mountains. This plan recognizes the importance of providing links to the other bikeways to provide connectivity for bike commuter and access for recreational riding.

The proposed bikeways should help create a more bicycle-friendly community and would likely increase the number of commuter and recreational bicyclists. With more routes and bicycle corridors in the Town of Loomis and the County of Placer, it is anticipated that bicyclists would be more likely to ride their bicycles from their homes to work, school and recreational destinations rather than driving their automobiles.

## **E. EXISTING END OF TRIP BICYCLE PARKING FACILITIES**

### **Bicycle Parking**

Bike racks are currently located at the train depot parking lot, schools, **the Raley's shopping center**, and various other area throughout the Town of Loomis. **Figures 3** identifies key bike parking facilities intended to support a park and ride facility in the heart of town.

As more bikeways are constructed and bicycle usage grows, the need for bike parking will increase. Short-term parking at shopping centers and similar land uses can support bicycling as well as long-term bicycle parking at transit stations and work sites.

### **Long Term Bicycle Parking**

Long-term bicycle parking facilities accommodate employees, students, residents, commuters, and others expected to park more than two hours. These parking facilities should be provided in a secure, weather protected manner







# Existing Conditions

and location.

## F. EXISTING BICYCLE TRANSPORT AND PARKING FACILITIES FOR CONNECTION WITH OTHER TRANSPORTATION MODES

Placer County Transit provides transit (the Taylor Road Shuttle and the Placer Commuter Express) through Town of Loomis, with connections to Auburn, CA, Sierra College in Rocklin, CA, and the City of Sacramento. The buses stop at the train station park and ride lot at Taylor Road and Horseshoe Bar Road, and at the Park and ride lot located on the east side of the Horseshoe Bar Road / I-80 interchange. Buses are equipped with bike racks. **Figure 3** identifies the existing bus stop locations in the Town of Loomis.



*The Town may want to encourage the use of custom bike racks that could be designed by members of the local art community.*

## G. EXISTING FACILITIES FOR CHANGING / STORING CLOTHES AND EQUIPMENT

Employers are encouraged to install bicycle parking facilities with lockers and shower facilities to encourage use of the bicycle as alternate transportation. **Figure 3** identifies the known locations of facilities with shower or locker facilities.

## H. BICYCLE INCIDENT ANALYSIS

Accident information related to bicycles, provided by Placer County Sheriff's Department (circa 2000 through 2008), includes the following:

- Car colliding with a cyclist - 3 injuries
- Car hitting cyclist at an intersection - 3 injuries
- Car hitting cyclist at a driveway - 2 injuries
- Truck colliding with a cyclist - 3 injuries
- Motor-home colliding with a cyclist - 1 injury
- Cyclist crashing into a deer - 1 death

A total of (15) reported bicycle-related incidents occurred in the Town of Loomis between 2000 and 2008. This translates into an average of (2) inci-





## EXISTING BUS ROUTES, PARK & RIDE, AND CHANGING FACILITY



EXISTING BUS DROP-OFF AND PICK UP  
(Placer Commuter Express Bus)



EXISTING BUS DROP-OFF AND PICK UP  
(Taylor Road Shuttle)



EXISTING PARK AND RIDE



EXISTING PLACER COMMUTER  
EXPRESS BUS ROUTE



EXISTING TAYLOR ROAD SHUTTLE BUS  
ROUTE (this bus can deviate from Taylor  
Road approximately 1/4-mile if the user calls  
ahead)



EXISTING CHANGING FACILITY (Del Oro  
High School)

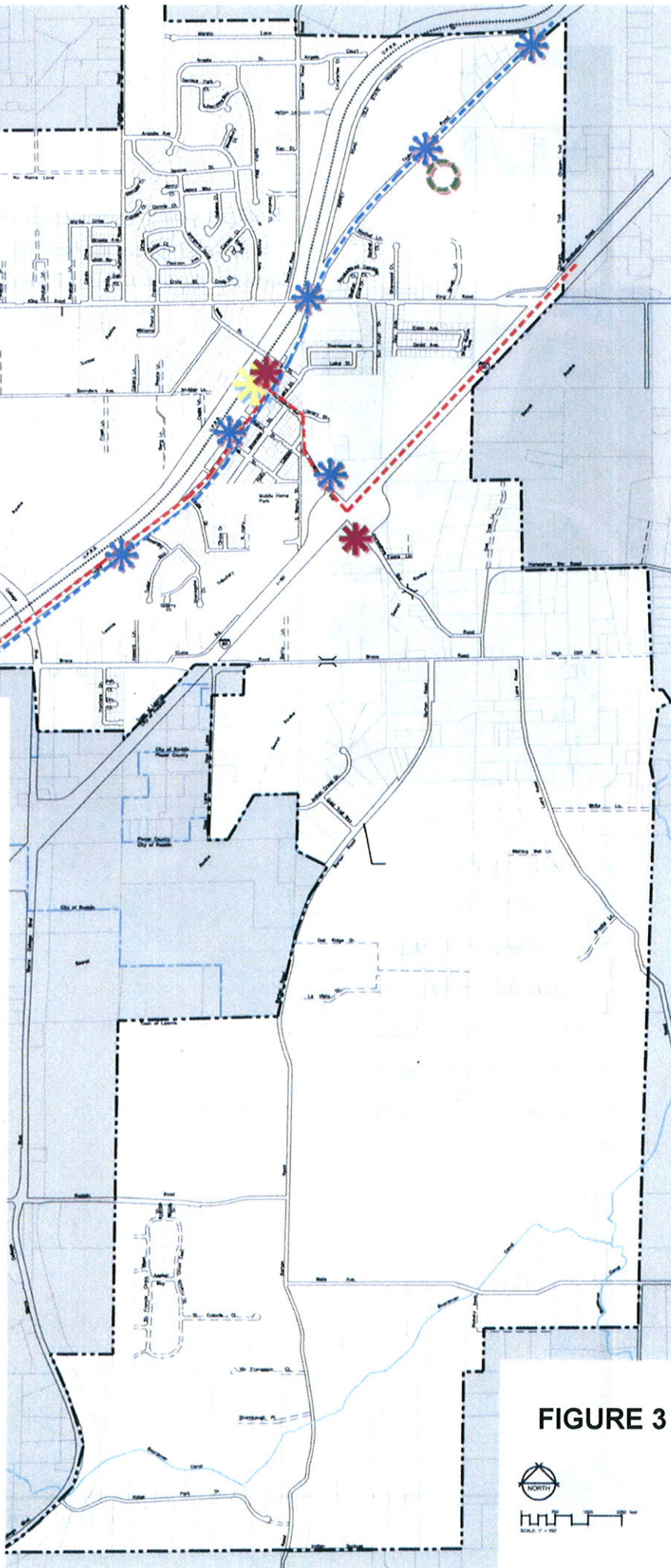


**Town of Loomis**  
**Bikeway Master Plan Update 2009**

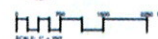
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**FIGURE 3**







## Existing Conditions

dents per year and an average of 0.3 incidents per 1,000 persons per year. The town's bicycle incident rate is below the national average. **Figure 4** illustrates the locations of bike related accidents.



Image Source: www.pedbikeimages.org - Photographer: Dan Burton

*The Town of  
Loomis Parks and  
Recreation  
Department  
promotes bicycle  
safety and partners  
on bicycle safety  
awareness events.*





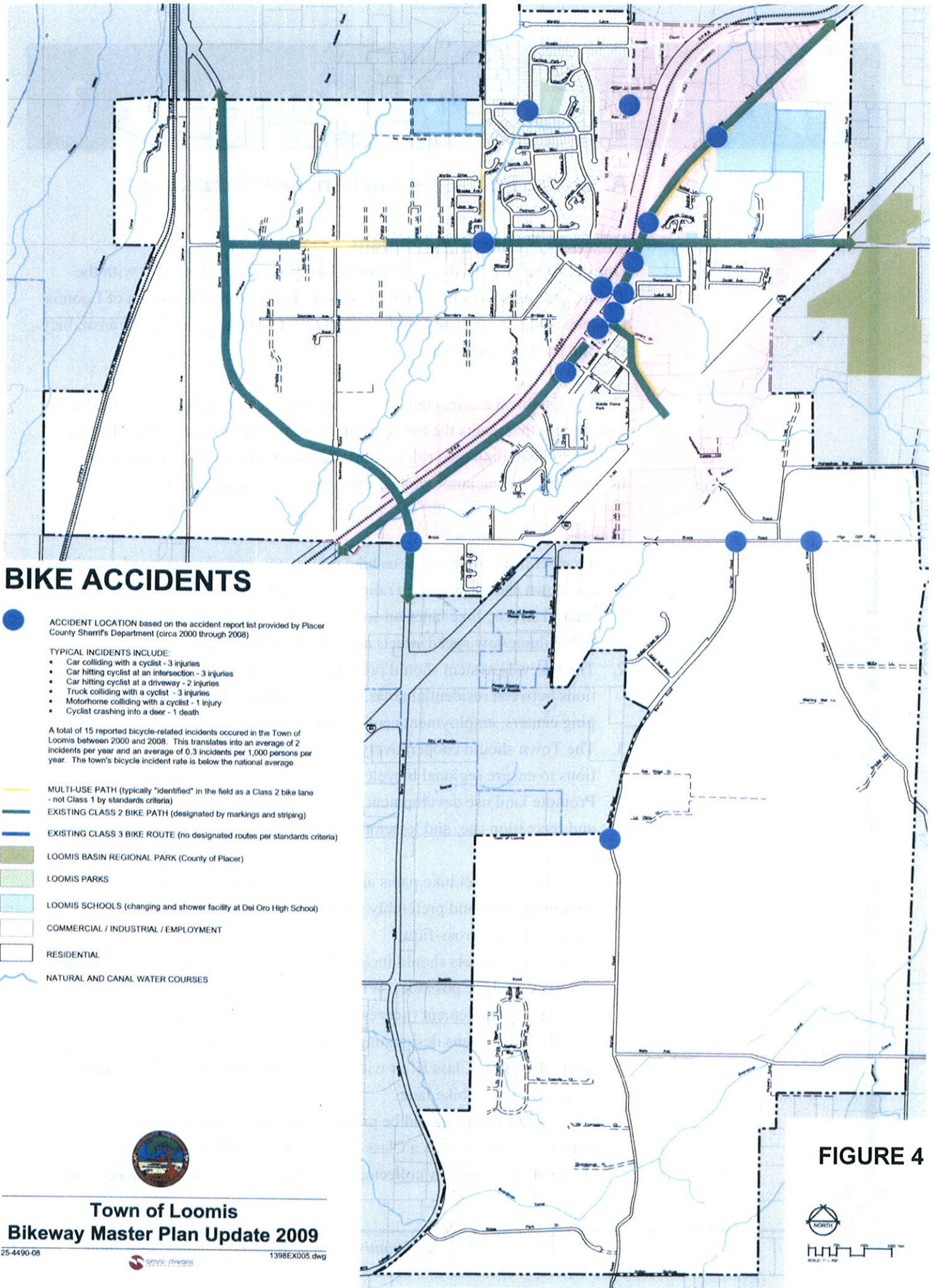


FIGURE 4







# Bikeway Master Plan 3

## A. Goals, Policies & Implementation Measures

### Bikeway Route Development

**Goal 1:** Achieve a balanced transportation system that, consistent with the Town of Loomis General Plan Circulation Element, provides Town of Loomis residents a variety of transportation choices, including automobile, transit, bicycle, and pedestrian options.

**Goal 2:** Establish a safe, comfortable, convenient and highly-connected bikeway system that meets the transportation and recreation needs of avid, regular, youth and beginning bike riders, while balancing the needs of other transportation types including automobiles, train, transit and pedestrians.

### **Policies**

1. To meet needs of the various bike rider types, and physical road conditions the Town should provide a range of bikeway types, including bike lanes on arterial streets, bike lanes on some collector streets, bike routes on selected low volume/low speed streets and off-street bike paths.
2. The bikeway system should provide convenient and comfortable connections between residential areas, schools, parks, public transit stops, shopping centers, employment centers and other uses.
3. The Town should cooperatively pursue connections to neighboring jurisdictions to ensure regional bicycle accessibility.
4. Promote land use development that enhance connectivity for transportation and recreation use, and lessen the distance of bicycle and pedestrian travel between uses.
5. Class I Off-Street bike paths are preferred when they result in bikeway continuity, safe and preferably separated crossings of major roads, and minimal traffic cross-flow.
6. New arterial streets should include Class II bike lanes and wide separated sidewalks (where possible). Wide (8-ft. minimum) separated sidewalks are intended to supplement (not replace) on-street bike lanes, and they typically do not include signs designating them as bikeways. However, there may be locations where Class III or wide separated sidewalks may be utilized in lieu of a Class II bike lane.
7. Class II bike lanes should be provided on new collector streets, but there may be instances when a Class III route will be substituted. The bikeway designation along new collector roads should consider: Anticipated traffic







# Bicycle Master Plan



Image Source: www.pedbikeimages.org - Photographer: Dan Burton

***Encouraging  
people to ride bikes  
can help to improve  
air quality.***

speeds and volumes; continuity of bike lane and destinations served; adjacent land uses; the availability of comparable alternative bike routes; and other applicable factors as determined by the Town Engineer.

8. Class III on-street bike routes may be designated to provide connections between or to Class I and Class II bikeways, or as an alternative to bicycling on Class II bike lanes on arterial streets.

9. Major roadway improvement projects proposed on existing arterial streets without bike lanes should include an investigation of the feasibility of installing Class II bike lanes.

10. Where a bikeway designation is changed from Class II bike lane to Class III bike route, signs shall be installed to inform motorists that bicycles will be sharing the road.

11. To meet the needs of beginning bike riders, bicycles should continue to be permitted to ride on all sidewalks, except where prohibited by the Municipal Code.

12. Bicycle crossings should be located at appropriate intervals along new roadways as determined by the Town Engineer. The Town should work with Caltrans to provide safe, convenient and comfortable crossings of State highways and freeways at regular intervals.

13. Provide bicycle signal detectors per local and state standards at all new signalized intersections with bike lanes and, if feasible, when modifying existing signalized intersections with bike lanes. Where designated Class III bike routes meet a signalized intersection, if feasible provide alternative treatment that may include bicycle push buttons or placement of a bicycle symbol over the "hot spot" of the standard signal loop.

14. Work with the Engineering, Planning, and Parks & Recreation Department staff to provide continuity in the design & construction of bikeway facilities.

## Implementation Measures

1. All bikeway construction projects should conform as applicable to the Town of Loomis Design / Construction Standards, Town of Loomis Parks Construction Standards, and state and federal standards.
2. All Town and development projects shall be reviewed by Town staff for conformance with the goals, policies and implementation measures of the Bicycle Transportation Plan (BTP).
3. The Engineering Department should work with other Departments to create a checklist for the evaluation of development projects for confor-







# Bicycle Master Plan

- mity to the Bicycle Transportation Plan (BTP).
4. Participate in regional bicycle and pedestrian planning activities.
  5. Coordinate bikeway system implementation projects internally and with adjacent jurisdictions.
  6. Provide training for Public Works Department, Planning Department and Parks & Recreation Department staff and commissions on the guiding principles of bicycle and pedestrian system transportation planning, design and maintenance.
  7. Consider updating the Municipal Code (Zoning Ordinance) to include requirements for bike facilities.

## **Bikeway Support Facilities**

**Goal:** Create an environment that includes support facilities necessary to encourage commuter and recreational bicycle riding.

### **Policies**

1. Support facilities that encourage bicycling should, to the extent feasible, be made a standard component of all private and public projects.
2. Provide short term bike parking (bike racks) conveniently located near business entrances and safe, secure and covered long term bike parking (bike lockers, bike rooms, bike cages) at employment sites and Park and Ride facilities.
3. Promote showers and changing facilities at major employment sites.
4. Support facilities along bike paths may include trailhead parking lots, route map displays, rest areas/benches, drinking water, bike racks, rest-rooms, and, where deemed necessary for safety such as in under-crossings, lighting. The support facilities may be provided with parks and other public facilities or provided separately.

### **Implementation Measures**

1. Consider updating the Municipal Code (Zoning Ordinance) to include requirements for bike facilities.
2. Develop standards for bicycle parking in the public realm of Downtown Town of Loomis and other pedestrian activity areas.
3. Consider funding an annual bike parking project to install long term bicycle parking at park-and-ride facilities, commuter bus stops, and short-term bike parking at existing businesses with a demonstrated need.





# Bicycle Master Plan

4. Adopt guidelines for and encourage the installation of showers and changing facilities for employees at major employment sites.
5. If warranted by demand, consider partnerships with public and private facilities for use of showers and changing rooms by commuting or touring bicyclists.
6. Where necessary to meet the needs of users and where not provided by other public facilities, plan for the installation of bike path amenities.
7. Designated bike routes shall include signs informing motorists of the presence of bicyclists and information signs informing cyclists of upcoming destinations in accordance with California MUTCD and the Design/Construction Standards.
8. Provide destination signs, trail maps, mile markers, open space and bike-way regulation signs on bike paths where appropriate.

## **Maintenance**

**Goal:** Maintain bikeways and support facilities to ensure preservation of the Town's capital improvements and to provide safe and comfortable facilities for cyclists and, on multi-use paths, for other users.

## **Policies**

1. All streets with Class II or III designation should be swept at regular intervals.
2. Develop guidelines for routine maintenance and long-term maintenance of off-street bike paths.
3. Where construction operations occur adjacent to Class II or III bikeways, the developer/contractor will be responsible for maintaining clear and clean paths of travel.
4. Street maintenance overlay projects and other construction projects within the public right-of-way and along designated bikeways shall be reviewed for conformance with the Bicycle Master Plan. Where facilities are not in conformance with the Bicycle Master Plan and current Town standards, the facilities may be brought up to standards where determined feasible by the Public Works Director/Town Engineer.
5. Construction projects within public right-of-way should address bicycle safety and movement per Federal, State and Local standards







# Bicycle Master Plan

## **Implementation Measures**

1. Inspect bikeways and support facilities on a regular basis.
2. Establish an on-line system for reporting, evaluating, tracking and responding to maintenance and safety concerns on bikeways.
3. Seek funding from new development projects for bikeway maintenance.
4. Create a sinking fund for unexpected bike path maintenance projects such as damage repair and long term overlay/reconstruction.
5. As staff time permits, support efforts of local bicycle groups, neighborhood associations, businesses and the Parks & Recreation Department to establish an Adopt a Path program(s) that address litter cleanup, pet waste cleanup, and as appropriate other bike path and open space maintenance activities.
6. Coordinate bikeway-related training for Streets and Open Space maintenance staff.
7. Consider updating the Design/Construction Standards to include standard provisions for Traffic Control Plans per the following:
  - Construction signs should be placed outside bike lanes where feasible;
  - Where a bike lane will be closed for an extended period, advance warning signs may be provided for bicyclists; and
  - Where a bike lane is closed, if feasible, and are between construction zone and vehicle lane may be provided for bicyclists.

## **Enforcement**

**Goal:** Enhance enforcement programs with the goal of reducing violations and bicycle injuries and fatalities by 10% over 10 years.

## **Policies**

1. Enforcement efforts directed at bicyclists should focus on child helmet laws, failure to stop/yield, wrong way bike riding, and night riding without lights/reflectors.
2. Enforcement efforts directed at motorists and related to bicycle safety should address motorist failure to yield or stop for cyclists, excessive motor vehicle speed, and driving under the influence.

## **Implementation Measures**

1. Assist the County Sheriff's Department in their officer training efforts related to bicycle issues and laws.





# Bicycle Master Plan

2. Coordinate with the County Sheriff's Department to determine enforcement strategies for bike riders.
3. Assist the ongoing efforts of the Parks & Recreation and Police Departments to provide enhanced oversight of open space areas and off-street bike paths.

## **Education**

**Goal 1:** Increase bike rider and motorist awareness of the rights and responsibilities of bike riders in order to create a climate of acceptance for bike riding, reduce bike rider violations, improve safe bicycling and driving practices, reduce collisions, and increase bicycle riding to work, school, and other destinations.

**Goal 2:** Increase awareness of users of multi-use paths of the rights and responsibilities of the various users.

## **Policies**

1. Education programs targeted to adults and children should explain safe bike riding techniques and the importance of proper helmet use, and provide information on the Town of Loomis bikeway system and support facilities.
2. Education programs targeted to school-age children should recognize the unique challenges associated with child and youth bike riders.
3. Raise motorist awareness of the rights of bicyclists to ride on the road, and provide motorists information on ways they can modify their driving behavior to more safely accommodate bicyclists.

## **Implementation Measures**

1. Create a coordinated and comprehensive bicycle safety education program that provides bicycle education annually to all school-age children.
2. Promote Safe Routes to School programs.
3. Create a coordinated and comprehensive bicycle education program targeted to adult bike riders with information regarding bike rider rights and responsibilities and proper bike riding techniques.
4. Expand and support a citywide helmet promotion program.
5. Create a public education campaign targeting motorists that provides information on the rights and responsibilities of bicyclists. Work with the County Sheriff's Department to identify opportunities for incorporat-







# Bicycle Master Plan

- ing bicycle safety curriculum into motorist education and training.
6. Develop education materials (e.g. handouts, videos) for presentation to media, schools, neighborhood groups, businesses and other groups that promote bicycle safety.
  7. Develop criteria and promote trail etiquette for use of off -street bike paths by bicyclists, pedestrians, equestrians (if applicable), skaters, and persons with disabilities.
  8. Coordinate education and encouragement efforts with the Parks and Recreation Department, public health agencies and/or other groups as opportunities arise.

## **Encouragement**

**Goal:** Increase transportation and recreation bicycle riding to work, school, play and other destinations by 50 percent by 2020, and gain acceptance of bicycle commuting as a mainstream activity through incentive and encouragement efforts.

## **Policies**

1. Encourage public participation through local coordination with Town staff .
2. Build coalitions with local businesses, schools, clubs, bike shops and organizations
3. Explore alternatives to provide incentives to bicycle commuters.
4. Support recreational bikeway facilities, programs and events as an important part of the effort to cultivate acceptance of bicycling among the general populace.

## **Implementation Measures**

1. Continue to support regional efforts to promote biking such as Bike Commute Month, and International Walk/Bike to School day.
2. As feasible, enhance incentives for bicycle commuting such as Bucks for Bikes and Bike Commute Month.
3. Sponsor in association with local bicycle organizations bicycle parking at special events.
4. Sponsor in association with local /regional bicycle organizations or other groups bicycle/ triathlon events and races, or other similar events.
5. If warranted by user levels and if an appropriate location is identified, support efforts of local bicycle groups to establish a bicycle station that





# Bicycle Master Plan

delivers bicycle parking, showers, restrooms, bicycle services.

## **Environmental**

**Goal 1:** Reduce traffic, improve air quality, and reduce emissions that contribute to climate change by providing a viable commute alternative to the automobile.

**Goal 2:** Enhance public access to open space and natural areas while, to the extent feasible, minimizing the environmental impacts of off-street bike path projects.

## **Policies**

1. Promote the beneficial aspects of bicycling through Bike Month, Spare the Air and other programs.
2. Work with the Open Space committee and Parks Department to identify opportunities for construction of bike paths in open space areas.
3. Coordinate and where feasible and beneficial partner bike trail projects with stream bank restoration, native habitat restoration, flood control projects and other related open space projects.
4. Bike trails through open space may, where appropriate and feasible, include interpretive signs informing the public of the environmental resources present and directing users to behave in a manner that reduces impacts on the open space.
5. Bike path planning, construction and maintenance should be consistent with the Town of Loomis Creek & Riparian Management Plan and open space preserve management plans.
6. Comply with applicable Local, State and Federal environmental regulations.
7. Bike trail projects, to the extent feasible, should minimize environmental impacts.
8. Formally recognize the Dry Creek Vision Master Plan and work with surrounding communities to help implement the vision as it applies to the Town of Loomis.

## **Implementation Measures**

1. As appropriate, coordinate the planning, environmental review, design, construction and maintenance of open space bike trail projects with Town departments, local, state and federal agencies, and local interest groups.







# Bicycle Master Plan

2. Partner with health organizations where appropriate to promote bicycling.

## **Funding**

**Goal:** Ensure adequate funding for construction and maintenance of bike-ways and support facilities, and education, encouragement, enforcement and evaluation programs.

## **Policies**

1. Create a bikeway system that is cost effective to construct and maintain.
2. Maximize funding opportunities through a combination of federal, state and local sources, including development agreements, community facilities districts and grants.
3. Utilize grant funds to leverage local bikeway funds.
4. Where feasible and appropriate, include bike lane improvements consistent with the Design/Construction Standards as part of Capital Improvement Program projects.
5. Where appropriate, partner bike path projects with flood control, redevelopment, utilities access, air quality improvement and open space/stream restoration projects.
6. Where bikeway projects cross jurisdictional boundaries, partner with adjacent jurisdictions as feasible to reduce costs.
7. Establish development impact fees that can be used to improve bike facilities.
8. Require new development to improve bike facilities within their project and / or as part of roadway improvements associated with a project.

## **Implementation Measures**

1. Submit grant applications in accordance with the Town's guidelines as grant programs become available.
2. Coordinate bikeway projects internally and with other agencies to determine partnering potential.
3. Where determined appropriate, adopt fee programs for bikeways.

## **Evaluation**

**Goal:** Evaluate the effectiveness of the City's bicycle programs and the efforts to implement the overarching bikeway goals of the General Plan and





# Bicycle Master Plan

the Bicycle Transportation Plan on an on-going basis. Strive to achieve a 50% increase in bicycle use over the next 10-years.

## Policies

1. Establish and implement a plan for regular measurement of the amount of cycling taking place in Town of Loomis.
2. Annually review bicycle collision data to identify commonalities/trends and target engineering, maintenance, enforcement, education and encouragement efforts to reduce collisions and injuries/fatalities.

## Implementation Measures

1. Prepare an annual report summarizing the bicycle program and collision data and identify a work plan to address any concerns in the report.
2. Measure bicycle use on Town streets and trails by 2010 to establish a benchmark for future measurements.

## B. PROPOSED BIKEWAY MASTER PLAN

The proposed Bikeway Master Plan illustrates a network of bikeways intended to connect the Town and provide improved bikeway conditions for those biking through the Town. See **Figure 5** for proposed bikeway locations. Bikeways are listed by Class 1, 2 or 3a, or 3b and are defined as follows:




- **Class 1 Bikeway (Bike Path).** Provides completely separated path for the exclusive use of bicycles and pedestrians with cross-flow minimized.
- **Class 2 Bikeway (Bike Lane).** Provides a striped lane for one-way bike travel on a street or highway.
- **Class 3 Bike Route.** Provides shared use with motor vehicle traffic, is identified by Bike Route signs. These routes are intended to have a minimum amount of paving (at least 2-ft) beyond the travel lane to provide more room for bicyclists.
- **Class 3b Bike Route.** Unsigned “bike routes” that provides “Share the Road” only signage on roads that are very narrow, winding, or difficult to widen due to physical /environmental constraints.





# EXISTING & PROPOSED BICYCLE FACILITIES






## EXISTING FACILITIES





-  MULTI-USE PATH (typically "identified" in the field as a Class 2 bike lane - **not** Class 1 by standards criteria)
-  EXISTING CLASS 2 BIKE LANE (designated by markings and striping)
-  EXISTING CLASS 3 BIKE ROUTE (no designated routes per standards criteria)

## PROPOSED FACILITIES







-  PROPOSED CLASS 1 PATH
-  PROPOSED CLASS 2 BIKE LANE
-  PROPOSED CLASS 3 BIKE ROUTE - Category A
-  PROPOSED CLASS 3 BIKE ROUTE - Category B

## LAND USE / OTHER RELATED FACILITIES

-  LOOMIS BASIN REGIONAL PARK (County of Placer)
-  LOOMIS PARKS
-  LOOMIS SCHOOLS (changing and shower facility at Del Oro High School)
-  COMMERCIAL / INDUSTRIAL / EMPLOYMENT
-  RESIDENTIAL

-  PARK & RIDE
-  LIBRARY
-  GOVERNMENT
-  FIRE STATION

## NATURAL AND CANAL WATER COURSES

-  Assumes facilities constructed as part of future TOWN development
-  Assumes facilities constructed as part of future PRIVATE development
-  At-grade bike / trail / road safety crossing needed
-  Coordination with County needed to connect trail to park
-  Assumes potential connection with future City of Rocklin private development
-  Continuation of facility on County or surrounding city maintained roads



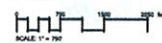
## Town of Loomis Bikeway Master Plan Update 2009

25-4490-08

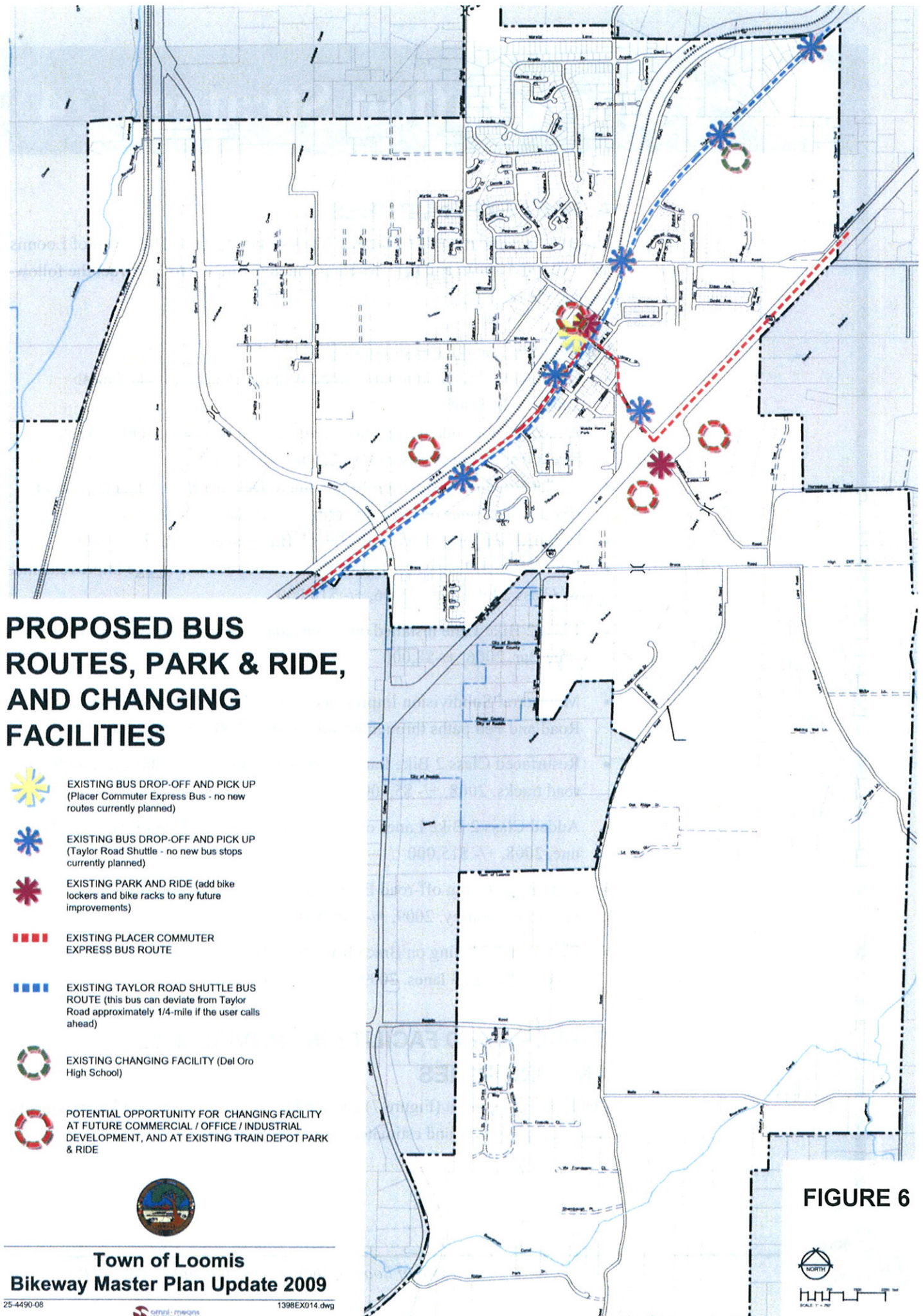


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FIGURE 5











# Prioritization Strategy 4

## A. PAST EXPENDITURES

Since the last update of the Bikeway Master Plan in 2003, The Town of Loomis has leveraged grants and land development construction to construct the following bicycle facilities:

### Location, Year, and Expenditure Cost

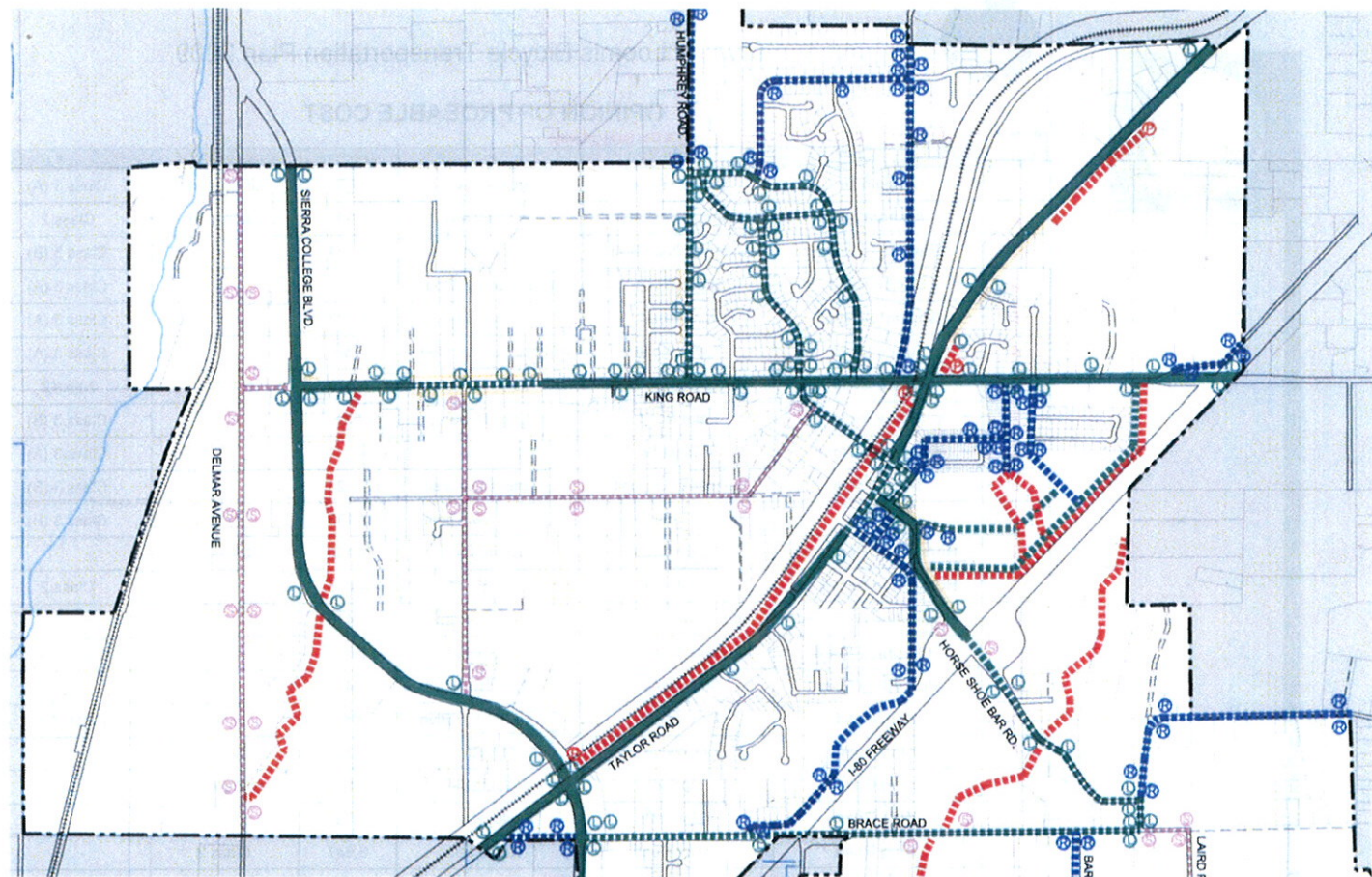
- Asphalt overlay of Humphrey Road w/ paved Class 2/3 bike lanes. 2004, +/- \$25,000
- Added a 5-foot bike/pedestrian paved path on the south side of Webb Street from King to Taylor Road. 2004, +/- \$5,000
- Taylor Road reconstruction from King to Del Oro High School, installed Class 2 bike lanes on both side of the road. 2005, +/- \$80,000
- Stripped Margaret Drive with Class 2 Bike Lanes. 2006, +/- \$5,000
- Lemos Ranch Estates on Taylor Road. Constructed frontage improvements w/ Class 2 bike lanes. 2006, +/- \$10,000
- Class 2 Bike Lane installed on South side of Brace from Barton to Horse-shoe Bar. 2006, +/- \$8,000
- Montserrat Subdivision Improvements w/ Class 3 Bike lanes on Barton Road and Ped paths throughout subdivision. 2007, +/- \$60,000
- Resurfaced Class 2 Bike Lanes on Sierra College from Bankhead to Railroad tracks. 2008, +/- \$5,000
- Added Class 2 Bike Lanes on King Road from Sun Knoll Dr to Day Avenue, 2008, +/- \$15,000
- King Road 6-foot off-road Bike/Ped path reconstruction from Sierra College to Humphrey. 2009, +/- \$30,000
- Pavement widening on Brace Road from Dias Lane to Secret Ravine Creek w/ Class 3 lanes. 2009, +/- \$10,000

## B. PROPOSED FACILITY IMPROVEMENTS AND PRIORITIES

The following exhibit (Figure 7) and Table 1 identifies proposed improvements, suggested priorities, and estimated cost in 2009 dollars.







# PROPOSED FACILITY IMPROVEMENTS

## EXISTING FACILITIES

- MULTI-USE PATH (typically "identified" in the field as a Class 2 bike lane - not Class 1 by standards criteria)
- EXISTING CLASS 2 BIKE LANE (designated by markings and striping)
- EXISTING CLASS 3 BIKE ROUTE (no designated routes per standards criteria)

## PROPOSED FACILITIES

- PROPOSED CLASS 1 PATH
- PROPOSED CLASS 2 BIKE LANE
- PROPOSED CLASS 3 BIKE ROUTE - Category A
- PROPOSED CLASS 3 BIKE ROUTE - Category B

- BIKE PATH SIGN USED FOR CLASS 1
- BIKE LANE SIGN USED FOR CLASS 2
- BIKE ROUTE SIGN USED FOR CLASS 3A ROUTES
- SHARE THE ROAD SIGN USED FOR CLASS 3B ROUTES

NOTE: SEE TABLE 1 "OPINION OF PROBABLE COST" FOR PRIORITY RATING, AND SEGMENT BREAKDOWN



FIGURE 7







# Town of Loomis Bicycle Transportation Plan 2009

## OPINION OF PROBABLE COST

P-No. = PRIORITY LEVEL No 1 thru 5 (1 is most priority & 5 is least priority)

P-No.	Street	from	to	Length (ft)	Existing Class	Proposed Class
5	Angelo Dr	Swetzer Road	Arcadia Ave	2,851	Undefined	Class 3 (A)
5	Arcadia Ave	Humphrey Road	King Road	3,907	Undefined	Class 2
5	Bankhead Road	Sierra College Blvd	King Road	3,754		Class 3 (B)
3	Barton Road	Brace Road	Indian Springs Road	14,122		Class 3 (A)
5	Boyington Road	King Road	Chisom Trail	1,107		Class 3 (A)
4	Brace Road	Taylor Road	Sierra College Blvd	850		Class 3 (A)
4	Brace Road	Sierra College Blvd	Laird Road	6,570		Class 2
5	Brace Road	Laird Road	Laird Road	531		Class 3 (B)
5	Connector Road	Walnut St	Stone Road	-----		Class 3 (A)
5	Delmar Ave	Loomis Town limit	Loomis Town limit	7,928		Class 3 (B)
5	Dias Ln	Loomis Town limit	Loomis Town limit	2,163		Class 3 (B)
2	Horseshoe Bar Road	Taylor Road	Route 80	2,100	Class 2	
2	Horseshoe Bar Road	Route 80	Laird Road	3,033		Class 2
2	Horseshoe Bar Road	Horseshoe Bar Road	Loomis Town limits	1,410		Class 3 (A)
5	Humphrey Road	Loomis Town limit	Arcadia Ave	2,013		Class 3 (A)
5	Humphrey Road	Arcadia Ave	King Road	2,460		Class 2
1	King Road	Delmar Ave	Sierra College Blvd	643		Class 3 (B)
1	King Road	Sierra College Blvd	Opel In	1,357	Class 2	
1	King Road	Opel In	Paloma Dr	1,552	Class 2 (non-stnd)	Class 2
1	King Road	Paloma Dr	Taylor Road	4,567	Class 2	
1	King Road	Taylor Road	Route 80	3,647	Class 2	
5	Magnolia St	Walnut St	Horseshoe Bar Road	458		Class 3 (A)
5	Margaret Dr	Sparas St	King Road	2,050		Class 2
5	Laird Road	Brace Road	Horseshoe Bar Road	347		Class 2
5	Laird Road	Brace Road	Loomis Town limits	5,232		Class 3 (B)
5	Laird St	Horseshoe Bar Road	Webb St	380		Class 2
5	Library Dr	Horseshoe Bar Road	End of Library Dr	395		Class 2
5	Library Dr Extension	End of Library Dr	King Road	-----		Class 2
5	Rocklin Road	Loomis Town limit	Barton Road	2,594		Class 2
5	Rutherford Canyon Rd	Barton Road	Laird Road	6,118		Class 3 (A)
5	Saunders Ave	Bankhead Road	Webb St	4,672		Class 3 (B)
5	Secret Ravine Creek Adjacent Path	Brace Road	Loomis Town limit (north of Brace)	4,456		Class 1
1	Sierra College Blvd	Loomis Town limit	King Road	2,614	Class 2	
1	Sierra College Blvd	King Road	Bankhead Road	4,753	Class 2	
1	Sierra College Blvd	Bankhead Road	Taylor Road	1,614	Class 2	
5	Sparas St	Arcadia Ave	Arcadia Ave	1,845		Class 2
5	Stone Road	Brace Road	End of Stone Road	1,363		Class 3 (A)
5	Sun Knoll Dr	King Road	End of Sun Knoll Dr	1,109		Class 3 (A)
5	Sun Knoll Dr Extension	End of Sun Knoll Dr	Library Dr Extension	-----		Class 1
5	Swetzer Road	King Road	Loomis Town limit	4,003		Class 3 (A)
1	Taylor Road	Loomis Town limit	Sierra College Blvd	1,293	Class 2	
1	Taylor Road	Sierra College Blvd	Walnut St	4,519	Class 2	Class 1
1	Taylor Road	Walnut St	Webb St	916		Class 2
1	Taylor Road	Webb St	King Road	1,070	Class 2	
1	Taylor Road	King Road	Loomis Tributary	2,378	Class 2 (non-stnd)	Class1
1	Taylor Road	Loomis Tributary	Loomis Town limit	2,839	Class 2	
1	Taylor Road	Sierra College Blvd	King Road	6,505		Class 1
1	Taylor Road	King Road	Loomis Town limit	5,217		Class 1
5	Thornwood Dr	Laird St	Sun Knoll Dr	1,386		Class 3 (A)
5	Walnut St	Taylor Road	End of Walnut St	2,317		Class 3 (A)
5	Webb St	King Road	Laird St	1,755		Class 2
5	Webb St Extension	Laird St	Library Dr Extension	-----		Class 2
5	Wells Ave	Barton Road	Morgan Pl	5,300		Class 3 (A)





## COST PER ITEM OF IMPROVEMENT

(Enter a "1" for one side of road; Enter a "2" for two sides of road. All costs are per linear foot unless otherwise noted)

TABLE 1

\$56	\$44	\$22	\$0.81	\$2.30	\$345			
PAVEMENT MARKINGS (EA)	4' SHOULDER	2' SHOULDER	6" STRIPE	REMOVE STRIPE	SIGNS (EA)	OTHER	plus Cost	Notes
0	0	0	0	0	6	\$0	\$2,070	Bike Route
15	0	0	2	0	10	\$0	\$10,586	
0	0	0	0	0	4	\$0	\$1,380	
0	0	2	2	0	25	\$25,000	\$677,729	Other= Aprox number of tree removals & fence relocate
0	0	0	0	0	4	\$0	\$1,380	Bike Route
0	0	0	0	0	4	\$0	\$1,380	Bike Route
11	2	0	2	0	8	\$0	\$592,118	Widen, Bike Lane
0	0	0	0	0	2	\$0	\$690	
								Will Be part of future Developer Project
0	0	0	0	0	13	\$0	\$4,485	Share the Road
0	0	0	0	0	4	\$0	\$1,380	Share the Road
0	0	0	2	2	5	\$0	\$14,766	
6	2	0	2	2	7	\$15,200	\$303,692	other= Widen Box Culvert 5 ft
0	0	2	2	2	6	\$0	\$72,866	
0	0	0	0	0	4	\$0	\$1,380	
10	0	0	2	0	9	\$0	\$7,629	
0	0	0	0	0	2	\$0	\$690	
6	0	0	2	2	4	\$0	\$10,145	
10	2	0	2	2	5	\$7,500	\$156,002	other= Aprox number of tree removals
22	0	0	2	2	12	\$0	\$33,741	
17	0	0	2	2	10	\$0	\$27,056	
0	0	0	0	0	4	\$0	\$1,380	
16	0	0	2	0	11	\$0	\$7,997	
0	2	0	2	2	1	\$0	\$33,036	Widen, Bike Lane
0	0	0	0	0	8	\$0	\$2,760	
3	0	0	2	0	4	\$0	\$2,161	Cost shown is for the elimination of parking. Widening would create RW IMPACT
1	0	0	1	0	2	\$0	\$1,064	Stripe and sign only developed side
								Will be part of future Developer Project
0	0	2	2	0	6	\$24,000	\$120,382	other= imported borrow for deep ditch
0	0	0	0	0	12	\$0	\$4,140	Bike Route
0	0	0	0	0	6	\$0	\$2,070	
								Will be part of future Developer Project
4	0	0	2	2	3	\$0	\$17,493	
6	0	0	2	2	4	\$0	\$31,234	
4	0	0	2	2	3	\$0	\$11,283	
4	0	0	2	0	5	\$0	\$4,921	
0	0	0	0	0	4	\$0	\$1,380	
0	0	0	0	0	6	\$0	\$2,070	
								Will be part of future Developer Project
0	0	0	0	0	9	\$0	\$3,105	Bike Route
3	0	0	2	2	3	\$0	\$9,234	
8	0	0	2	2	7	\$0	\$30,929	
7	0	0	2	2	8	\$0	\$8,843	Assumed will eliminate parking from Horseshoe to Webb
4	0	0	2	2	4	\$0	\$8,250	
4	0	0	2	2	3	\$0	\$16,028	
1	0	0	2	2	2	\$0	\$18,377	
10	0	0	0	0	2	\$184,132	\$185,385	other= AC&AB for class 1 path cost only
10	0	0	0	0	2	\$62,189	\$63,442	other= AC&AB for class 1 path cost only
0	0	0	0	0	7	\$0	\$2,415	
0	0	0	0	0	6	\$0	\$2,070	
10	1	0	2	1	7	\$2,000	\$89,061	Widen one side, stripe both sides; other=tree removals
								Will be part of future Developer Project
0	0	0	0	0	5	\$0	\$1,725	Share the Road





# Funding Opportunities 5

There are a variety of potential funding sources that can be used for bicycle projects, programs and plans from all levels of government. This section covers federal, state, regional and local sources of funding, as well as some non-traditional funding sources that may be used for bicycle projects.

## A. Federal Funding Sources

The primary federal source of surface transportation funding, including bicycle and pedestrian Facilities, is the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users. This Federal bill is the third iteration of the transportation vision established by Congress in 1991 with the Intermodal Surface Transportation Efficiency Act and renewed in 1998 and extended in 2003 through the Transportation Equity Act for the 21st Century and the Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003. Also known as the Federal Transportation Bill, the \$286.5 billion bill was passed in 2005 and authorizes federal surface transportation programs for the five-year period between 2005 and 2009.

Federal funding is administered through the state (Caltrans and the State Resources Agency) and regional planning agencies. Most, but not all, of these funding programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Many Federal programs require a local match of between 10-20%. Federal funding is intended for capital improvements and safety and education programs and projects must relate to the surface transportation system.

Specific funding programs under the federal transportation bill for bicycle facilities that might be potential funding sources for the CBSP may include:

*Federal Lands Highway Funds:* Approximately \$1 billion dollars are available nationally through 2009 for planning and construction of bicycle projects built in conjunction with roadways

*Transportation, Community and System Preservation Program:* \$270 million nationally through 2009 for projects that improve the efficiency of the transportation system, reduce the impact on the environment, and provide efficient access to jobs, services and trade centers

*Recreational Trails Program:* \$370 million nationally through 2009 for non-motorized trail projects.







# Funding Opportunities

*Congestion Mitigation and Air Quality Improvement Program:* About \$1.7 billion available nationwide per year. Estimated annual program level for California is \$360 million.

*Highway Safety Improvement Program:* The annual program funding is approximately \$54 million for Federal Fiscal Year 2008/2009 at which time the HSIP program will end, unless it is extended or reauthorized. The maximum funding amount for a project is \$1 million, and the federal reimbursement rate is 90%.

*Regional Surface Transportation Program:* Estimated annual program level is \$330 million which is eligible for State Match and Exchange Program funding.

*Safe Routes to School:* This is a 100% federal reimbursement program. California will receive \$68 million over the five year life of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). There is no local match required.

*Transportation Enhancements:* California will receive approximately \$75 million per year for five years, starting in 2006.

## **Federal Lands Highway Funds**

Federal Lands Highway Funds may be used to build bicycle and pedestrian facilities in conjunction with roads and parkways at the discretion of the department charged with administration of the funds. The projects must be transportation-related and tied to a plan adopted by the State and Metropolitan Planning Organization. Federal Lands Highway Funds may be used for planning and construction and is managed by the United States Department of Transportation.

## **Transportation, Community and System Preservation Program**

The Transportation, Community and System Preservation Program provides federal funding for transit oriented development, traffic calming and other projects that improve the efficiency of the transportation system, reduce the impact on the environment, and provide efficient access to jobs, services and trade centers. The program is intended to provide communities with the resources to explore the integration of their transportation system with community preservation and environmental activities. The Program funds require a 20 % match and can be applied to planning, design and construction and is







# Funding Opportunities

administered through the Federal Highway Administration.

## **Recreational Trails Program**

The Recreational Trails Program (RTP) provides funds annually for recreational trails and trails related projects. The RTP is administered at the federal level by the Federal Highway Administration (FHWA). It is administered at the state level by the California Department of Parks and Recreation (DPR). The maximum amount of RTP funds allowed for each project is 88% of the total project cost. The applicant is responsible for obtaining a match amount that is at least 12% of the total project cost. The application deadline is in October. Funds may be used for:

Maintenance and restoration of existing trails;

Purchase and lease of trail construction and maintenance equipment;

Construction of new trails; including unpaved trails

Acquisition of easements or property for trails;

State administrative costs related to this program (limited to seven percent of a State's funds);

And Operation of educational programs to promote safety and environmental protection related to trails (limited to five percent of a State's funds).

## **Land and Water Conservation Fund**

The Land and Water Conservation Fund is a federally funded program that provides grants for planning and acquiring outdoor recreation areas and facilities. The Fund is administered by the National Parks Service and the California Department of Parks and Recreation and has been reauthorized until 2015. Cities, counties and districts authorized to acquire, develop, operate and maintain park and recreation facilities are eligible to apply. The application deadline is in May, and applicants must fund the entire project, and will be reimbursed for 50% of costs. Property acquired or developed under the program must be retained in perpetuity for public recreational use.

## **Congestion Mitigation and Air Quality Improvement Program (CMAQ)**

CMAQ Funds are directed to transportation projects and programs which contribute to the attainment or maintenance of National Ambient Air Quality Standards in non attainment or air quality maintenance areas for ozone, carbon monoxide, or particulate matter under provisions in the Federal Clean Air Act. Eligible projects include bicycle facilities.







# Funding Opportunities

## **Highway Safety Improvement Program (HSIP)**

The Highway Safety Improvement Program is managed locally by Caltrans. For a project to be eligible for HSIP funds, the project must be on any public road, publicly owned bicycle, pedestrian pathway, or trail. Projects must identify a specific safety problem that can be corrected or be improved substantially.

## **Regional Surface Transportation Program (RSTP)**

Regional Surface Transportation Program (RSTP) funding is distributed based on population, among the urbanized and non-urbanized areas of the State through Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs). Bicycle facilities are eligible for funding through this federally administered program.

## **Safe Routes to School (SRTS)**

Eligible projects fall under the category of infrastructure (capital improvements), or non-infrastructure (education, encouragement, enforcement). Infrastructure projects must be located within a two mile radius of a grade school or middle school. Local Caltrans representatives serve as the administrative authority on SRTS projects.

## **Transportation Enhancements (TE)**

Federal Transportation Enhancement funds are to be used for transportation-related capital improvement projects that enhance quality-of-life, in or around transportation facilities. Facilities that qualify for TE funds include bicycle safety, education and facility projects. Transportation Enhancements projects are managed locally by Caltrans.

## **B. Statewide Funding Sources**

The State of California uses both federal sources and its own budget to fund bicycle projects and programs.

## **Bicycle Transportation Account**

The Bicycle Transportation Account provides state funding for local projects that improve the safety and convenience of bicycling for transportation. Because of its focus on transportation, Bicycle Transportation Account projects must provide a demonstrable level of utility for transportation purposes. For example, all in-town on-street and paved bikeways would be good candidates for funding. Funds are available for both planning and construction.







# Funding Opportunities

Bicycle Transportation Account funding is administered by Caltrans and cities and counties must have an adopted Bicycle Transportation Plan in order to be eligible. The maximum amount available through the Bicycle Transportation Account is \$1.2 million dollars, cities and counties are eligible to apply. All projects must be designed to the standards outlined in Chapter 1000 of the Highway Design Manual. The application deadline is in December.

## **Community Based Transportation Planning Demonstration Grant Program**

This fund, administered by Caltrans, provides funding for projects that exemplify livable community concepts including bicycle improvement projects. Eligible applicants include local governments, metropolitan planning organizations and regional transportation planning agencies. A 20% local match is required and projects must demonstrate a transportation component or objective. There is \$3 million available annually statewide. The application deadline is in October.

## **Safe Routes to School (SR2S)**

To be eligible for SR2S funds, the project must be located on any state highway or on any local road. Projects must correct an identified safety hazard or problem on a route that students use for trips to and from school. Up to 10 percent of the project's cost can fund a non infrastructure component that supports the infrastructure project. Only cities and counties are eligible to compete for funds.

## **State Transportation Improvement Program (STIP)**

All STIP projects must be capital projects (including project development costs) needed to improve transportation. Eligible projects include bicycle facility improvements and improved access to transit and are administered by Caltrans.

## **Transportation Development Act**

Transportation Development Act Article 3 funds are state block grants awarded monthly to local jurisdictions for transit, bicycle and pedestrian projects in California by Caltrans. Funds for pedestrian projects originate from the Local Transportation Fund, which is derived from a ¼ cent of the general state sales tax. Local Transportation Funds are returned to each county based on sales tax revenues. Article 3 of the Transportation Development Act sets aside 2% of the Local Transportation Funds for bicycle and pedestrian pro-







# Funding Opportunities

jects. Eligible pedestrian and bicycle projects include: construction and engineering for capital projects; maintenance of bikeways; bicycle safety education programs (up to 5% of funds); and development of comprehensive bicycle or pedestrian facilities plans. A Town or county may use these funds to update their bicycle and pedestrian plan not more than once every five years. These funds may be used to meet local match requirements for federal funding sources. Application deadlines vary within county transportation agencies.

## **C. Local and Regional Funding Sources**

### **Developer Impact Fees**

Fees placed on new development local government could be used as local matching funds to attract other grant sources.

## **D. Non-Traditional Funding Sources**

### **Community Development Block Grants**

The Community Development Block Grant program provides money for streetscape revitalization, which may be largely comprised of pedestrian improvements. Federal Community Development Block Grant grantees may “use [these] funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities, paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grant funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.”

### **American Greenways Program**

Administered by The Conservation Fund, the American Greenways Program provides funding for the planning and design of greenways. Applications for funds can be made by local regional or statewide non-profit organizations and public agencies. The maximum award is \$2,500, but most range from \$500 to \$1,500. American Greenways Program monies may be used to fund unpaved trail development. The application deadline is June 1.







# Appendix A

## FULL TEXT OF STREETS AND HIGHWAYS CODE, SECTION 890-894.2

890. It is the intent of the Legislature, in enacting this article, to establish a bicycle transportation system. It is the further intent of the Legislature that this transportation system shall be designed and developed to achieve the functional commuting needs of the employee, student, business person, and shopper as the foremost consideration in route selection, to have the physical safety of the bicyclist and bicyclist's property as a major planning component, and to have the Town or county to accommodate bicyclists of all ages and skills.

890.2. As used in this chapter, "bicycle" means a device upon which any person may ride, propelled exclusively by human power through a belt, chain, or gears, and having either two or three wheels in a tandem or tricycle arrangement.

890.3. As used in this article, "bicycle commuter" means a person making a trip by bicycle primarily for transportation purposes, including, but not limited to, travel to work, school, shopping, or other destination that is a center of activity, and does not include a trip by bicycle primarily for physical exercise or recreation without such a destination.

890.4. As used in this article, "bikeway" means all facilities that provide primarily for bicycle travel. For purposes of this article, bikeways shall be categorized as follows:

(a) Class I bikeways, such as a "bike path," which provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with cross flows by motorists minimized.

(b) Class II bikeways, such as a "bike lane," which provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and cross flows by pedestrians and motorists permitted.

(c) Class III bikeways, such as an on-street or off-street "bike







## Appendix A

route," which provide a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists.

890.6. The department, in cooperation with county and Town governments, shall establish minimum safety design criteria for the planning and construction of bikeways and roadways where bicycle travel is permitted. The criteria shall include, but not be limited to, the design speed of the facility, minimum widths and clearances, grade, radius of curvature, pavement surface, actuation of automatic traffic control devices, drainage, and general safety. The criteria shall be updated biennially, or more often, as needed.

890.8. The department shall establish uniform specifications and symbols for signs, markers, and traffic control devices to designate bikeways, regulate traffic, improve safety and convenience for bicyclists, and alert pedestrians and motorists of the presence of bicyclists on bikeways and on roadways where bicycle travel is permitted.

891. All Town, county, regional, and other local agencies responsible for the development or operation of bikeways or roadways where bicycle travel is permitted shall utilize all minimum safety design criteria and uniform specifications and symbols for signs, markers, and traffic control devices established pursuant to Sections 890.6 and 890.8.

891.2. A Town or county may prepare a bicycle transportation plan, which shall include, but not be limited to, the following elements:

(a) The estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan.

(b) A map and description of existing and proposed land use and settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, and major employment centers.

(c) A map and description of existing and proposed bikeways.

(d) A map and description of existing and proposed end-of-trip bicycle parking facilities. These shall include, but not be limited







## Appendix A

to, parking at schools, shopping centers, public buildings, and major employment centers.

(e) A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These shall include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.

(f) A map and description of existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom, and shower facilities near bicycle parking facilities.

(g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.

(h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.

(i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting.

(j) A description of the projects proposed in the plan and a listing of their priorities for implementation.

(k) A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.

891.4. (a) A Town or county that has prepared a bicycle transportation plan pursuant to Section 891.2 may submit the plan to the county transportation commission or transportation planning agency for approval. The Town or county may submit an approved plan to the department in connection with an application for funds for







## Appendix A

bikeways and related facilities which will implement the plan. If the bicycle transportation plan is prepared, and the facilities are proposed to be constructed, by a local agency other than a Town or county, the Town or county may submit the plan for approval and apply for funds on behalf of that local agency.

(b) The department may grant funds applied for pursuant to subdivision (a) on a matching basis which provides for the applicant's furnishing of funding for 10 percent of the total cost of constructing the proposed bikeways and related facilities. The funds may be used, where feasible, to apply for and match federal grants or loans.

891.5. The Sacramento Area Council of Governments, pursuant to subdivision (d) of Section 2551, may purchase, operate, and maintain call boxes on class 1 bikeways.

891.8. The governing body of a Town, county, or local agency may do all of the following:

- (a) Establish bikeways.
- (b) Acquire, by gift, purchase, or condemnation, land, real property, easements, or rights-of-way to establish bikeways.
- (c) Establish bikeways pursuant to Section 21207 of the Vehicle Code.

892. (a) Rights-of-way established for other purposes by cities, counties, or local agencies shall not be abandoned unless the governing body determines that the rights-of-way or parts thereof are not useful as a non-motorized transportation facility.

(b) No state highway right-of-way shall be abandoned until the department first consults with the local agencies having jurisdiction over the areas concerned to determine whether the right-of-way or part thereof could be developed as a non-motorized transportation facility. If an affirmative determination is made, before abandoning the right-of-way, the department shall first make the property available to local agencies for development as non-motorized transportation facilities in accordance with Sections 104.15 and 887.6 of this code and Section 14012 of the Government Code.







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892.2. (a) The Bicycle Transportation Account is continued in existence in the State Transportation Fund, and, notwithstanding Section 13340 of the Government Code, the money in the account is continuously appropriated to the department for expenditure for the purposes specified in Section 892.4. Unexpended moneys shall be retained in the account for use in subsequent fiscal years.

(b) Any reference in law or regulation to the Bicycle Lane Account is a reference to the Bicycle Transportation Account.

892.4. The department shall allocate and disburse moneys from the Bicycle Transportation Account according to the following priorities:

(a) To the department, the amounts necessary to administer this article, not to exceed 1 percent of the funds expended per year.

(b) To counties and cities, for bikeways and related facilities, planning, safety and education, in accordance with Section 891.4.

892.5. The Bikeway Account, created in the State Transportation Fund by Chapter 1235 of the Statutes of 1975, is continued in effect, and, notwithstanding Section 13340 of the Government Code, money in the account is hereby continuously appropriated to the department for expenditure for the purposes specified in this chapter. Unexpended money shall be retained in the account for use in subsequent fiscal years.

892.6. The Legislature finds and declares that the construction of bikeways pursuant to this article constitutes a highway purpose under Article XIX of the California Constitution and justifies the expenditure of highway funds therefore.

893. The department shall disburse the money from the Bicycle Transportation Account pursuant to Section 891.4 for projects that improve the safety and convenience of bicycle commuters, including, but not limited to, any of the following:

(a) New bikeways serving major transportation corridors.

(b) New bikeways removing travel barriers to potential bicycle commuters.

(c) Secure bicycle parking at employment centers, park-and-ride lots, rail and transit terminals, and ferry docks and landings.







## Appendix A

- (d) Bicycle-carrying facilities on public transit vehicles.
- (e) Installation of traffic control devices to improve the safety and efficiency of bicycle travel.
- (f) Elimination of hazardous conditions on existing bikeways.
- (g) Planning.
- (h) Improvement and maintenance of bikeways.

In recommending projects to be funded, due consideration shall be given to the relative cost effectiveness of proposed projects.

893.2. The department shall not finance projects with the money in accounts continued in existence pursuant to this article which could be financed appropriately pursuant to Article 2 (commencing with Section 887), or fully financed with federal financial assistance.

893.4. If available funds are insufficient to finance completely any project whose eligibility is established pursuant to Section 893, the project shall retain its priority for allocations in subsequent fiscal years.

893.6. The department shall make a reasonable effort to disburse funds in general proportion to population. However, no applicant shall receive more than 25 percent of the total amounts transferred to the Bicycle Transportation Account in a single fiscal year.

894. The department may enter into an agreement with any Town or county concerning the handling and accounting of the money disbursed pursuant to this article, including, but not limited to, procedures to permit prompt payment for the work accomplished.

894.2. The department, in cooperation with county and Town governments, shall adopt the necessary guidelines for implementing this article.







# Appendix B

## DESIGN GUIDELINES

This section provides basic bikeway planning and design guidelines for use in developing the TOWN OF LOOMIS bikeway system and support facilities. Where noted, designs are for elements required by the State of California for compliance with Caltrans Highway Design Manual Chapter 1000 "Bikeway Planning and Design" guidelines. Otherwise, these guidelines include additional recommendations, providing information on optional design treatments. Although this information meets Caltrans requirements it is not intended to state a minimum or maximum accommodation or to replace any existing adopted roadway design guidelines. Also included in this Chapter are experimental or non-standard best practices with information about optional innovative bikeways and support facilities that have not been adopted by the Manual of Uniform Traffic Control Devices (MUTCD) or State of California for use in California and do not meet Caltrans Chapter 1000 design requirements. All facility designs are subject to engineering design review.

### Bikeway Facility Classifications

According to Caltrans, the term "bikeway" encompasses all facilities that provide primarily for bicycle travel. Caltrans has defined three types of bikeways in Chapter 1000 of the Highway Design Manual: Class I, Class II, and Class III. For each type of bikeway facility both "Design Requirements" and "Additional Design Recommendations" are provided. "Design Requirements" contain requirements established by Caltrans Chapter 1000 "Bikeway Planning and Design." "Additional Design Recommendations" are provided as guidelines to assist with design and implementation of facilities and include alternate treatments approved or recommended but not required by Caltrans.

### Class I Bikeway Design

Typically called a "bike path" or "shared use path," a Class I bikeway provides bicycle travel on a paved right-of-way completely separated from any street or highway. The recommended width of a shared use path is dependent upon anticipated usage:

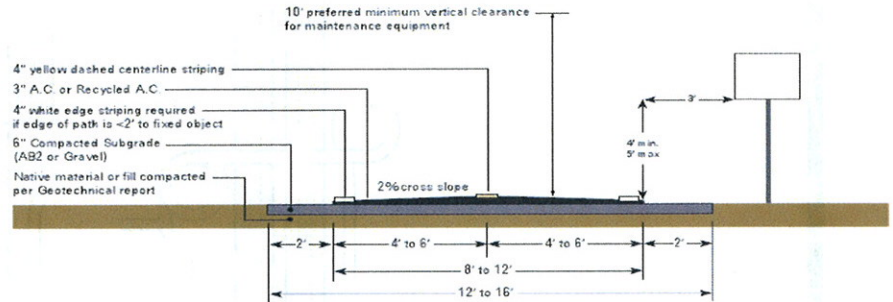
- 8 feet (2.4 m) is the minimum width for Class I facilities
- 8 feet (2.4 m) may be used for short neighborhood connector paths (generally less than one mile in length) due to low anticipated volumes of use
- 10 feet (3.0 m) is the recommended minimum width for a typical two-way bicycle path
- 12 feet (3.6 m) is the preferred minimum width if more than 300 users per



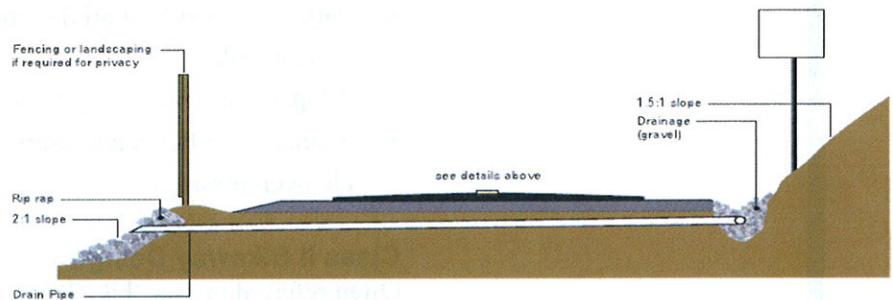




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Implementation on Level Ground



Implementation on Sloped Ground

peak hour are anticipated, and/or if there is heavy mixed bicycle and pedestrian use a minimum 2 feet (0.6 m) wide graded area must be provided adjacent to the path to provide clearance from trees, poles, walls, guardrails, etc. On facilities with expected heavy use, a yellow centerline stripe is recommended to separate travel in opposite directions.

### Class I Bikeway Crossing Designs

#### At-Grade Intersection

When shared-use paths cross streets, proper design should be developed on the pathway as well as on the roadway to alert bicyclists and motorists of the crossing. Sometimes on larger streets, at midblock pathway crossing locations an actuated signal is necessary. A signal allows bicyclists a clear crossing of a multi-lane roadway. If a signal is or is not needed, appropriate signage and pavement markings should be installed, including stop signs and bike crossing pavement markings.

#### Overcrossings

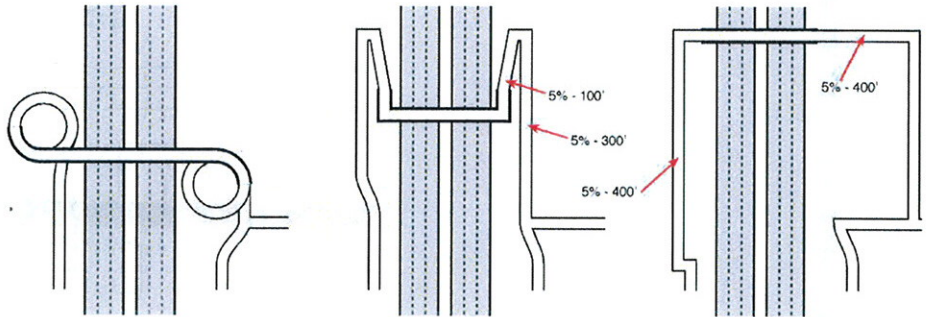
Overcrossings are also an important component of bikeway design. Barriers to bicycling often include freeways, complex interchanges, and rivers. When







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a route is not available to cross these barriers a bicycle overcrossing is necessary. Some design considerations for overcrossings include:

- Pathways must be a minimum 6 feet wide, with a preferred width of 8 or 10 feet wide
- Slope of any ramps must comply with ADA Guidelines
- Screens are often a necessary buffer between vehicle traffic and the bicycle overcrossing

### Class II Bikeway Design

Often referred to as a “bike lane,” a Class II bikeway provides a striped and stenciled lane for one-way travel on either side of a street or highway. To provide bike lanes along corridors where insufficient space is currently available, extra room can be provided by removing a traffic lane, narrowing traffic lanes, or prohibiting parking. The width of the bike lanes vary according to parking and street conditions. Note that these dimensions are for reference only, may not meet Town of Loomis Standards and are subject to engineering design review.

- 4 feet (1.2 m) minimum if no gutter exists, measured from edge of pavement
- 5 feet (1.5 m) minimum with normal gutter, measured from curb face; or 3' (0.9 m) measured from the gutter pan seam
- 5 feet (1.5 m) minimum when parking stalls are marked
- 11 feet (3.3 m) minimum for a shared bike/parking lane where parking is permitted but not marked on streets without curbs; or 12 feet (3.6 m) for a shared lane adjacent to a curb face.

### Class II Intersection Design-Signalized Intersections

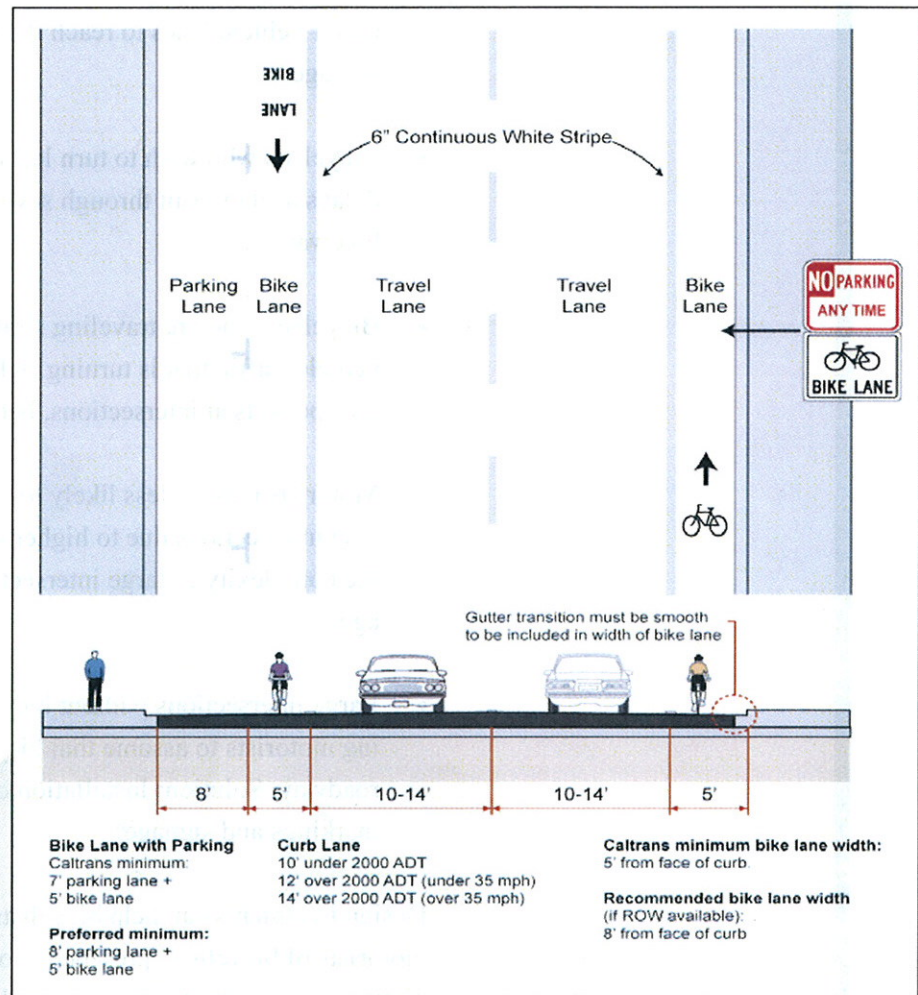
Intersections represent a primary collision points for bicyclists. Small intersections with few lanes are relatively easy to manage. Large, multi-lane intersections are more difficult for bicyclists to travel through than smaller, two-lane intersections.







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### Challenges and potential solutions for bicyclists' at large signalized intersections include:

- Signals may not be timed to allow slower-moving bicyclists to travel across the intersection. Solution: Bicycle adaptive signal timing.
- Loop detectors or video detection that is used to actuate the signal may not be calibrated to detect bicyclists. Solution: Design standard of bike loop use.
- Bicyclists may not know how to actuate the signal using loop detectors, even if it is calibrated. Solution: Use of bike loop detector symbol.
- Bicyclists who wish to turn left may be required to travel across several







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motor vehicle lanes to reach the left hand turn lane. Solution: Enhanced signage.

- Bicyclists who wish to turn left like a pedestrian may experience long delays as they wait through several light cycles. Solution: Well-signed bikeways.
- Bicyclists who are traveling straight may have to merge across motor vehicle traffic that is turning right from a right-turn lane. Solution: Bike lane pockets at intersections, between through and right turn lanes.
- Motorists may be less likely to be aware of bicyclists' at large, multi-lane intersections due to higher traffic volumes, more lanes of traffic and the complexity of large intersections. Solution: Enhanced bike lane signage.
- Large intersections without bicycle facilities are very auto-centric, leading motorists to assume that bicyclists are not supposed to be on the roadway. Solution: Installation of bicycle facilities, including pavement markings and signage.

Design treatments can help bicyclists travel through intersections and alert motorists of bicyclists' presence. Good intersection design alerts motorists to bicyclists, indicates to motorists and bicyclists where bicyclists may ride, and guides bicyclists through intersections. This treatment provides a design for where a roadway with Class II bike lanes intersects with a road at a signalized intersection.

### **Bicycle Actuated Signals & Adaptive Signal Timing**

Make intersections more "friendly" to bicyclists, involves modifying how they operate. Improved signal timing, calibrating loop detectors to detect bicyclists, and camera detection makes intersections easier for bicyclists to cross intersections. Loop detectors are installed within the roadway to allow the metal of a motor vehicle to trigger a change in the traffic signal. Many standard motor vehicle loop detectors can be calibrated to detect bicycles. This allows the bicyclist to stay within the lane of travel and avoid maneuvering to the side of the road to trigger a push button. Signals can be configured so that if a bicycle is detected, an extended green time can be provided.







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TOWN OF LOOMIS should use hard-wire loops at signalized intersections with bike lanes instead of video detection to reduce false detection or extension of green for adaptive timing.

### Signal Timing

Cities often apply signal timing techniques to enhance bicycle travel along major streets. For instance, closely-spaced signals (e.g., along one-way streets in downtown areas) can be timed to match bicyclists' travel speeds. Signals timed for speeds of 12 to 16 MPH enable most bicyclists to ride comfortably with traffic. Signal timing should also take into account the necessary time needed for a bicyclist to cross a wide intersection. Activation devices can also be used on a roadway approach to prolong the green phase and extend the time needed for a bicyclist to clear the intersection. Standards suggest intersections utilize markings to indicate the location where a bicyclist is to be positioned in order to actuate a signal. Adjacent signage is also recommended to emphasize the connection between the marking and the signal.

### Right-Turn Only Lanes

Right-turn only lanes can present challenges for bicyclists traveling through an intersection. Bicyclists must merge to the left to position themselves in the through travel lane. Jurisdictions will sometimes stripe bike lanes on the right-side of right-turn only lanes, which places the through-cyclist in direct conflict with a right-turning vehicle. The appropriate treatment for right-turn only lanes is to either drop the bike lane entirely approaching the right-turn lane, or to place a bike lane pocket between the right-turn lane and the right-most through lane.

### Freeway Ramps

Freeway on- and off-ramp crossings present a potential conflict zone for bicyclists and motorists, as bicycle lanes are typically dropped and bicyclists must merge across travel lanes where vehicles are accelerating or decelerating from freeway speeds. The appropriate bicyclist behavior is to merge left away so as to be positioned in the through lane well before the mouth of the on-ramp, and to remain out away from the curb until past the off-ramp. Implementation of interchange improvements requires coordination with Caltrans District 3 regarding placement of signage and striping because these areas are in Caltrans' right-of-way. Two guidelines for these improvements are:

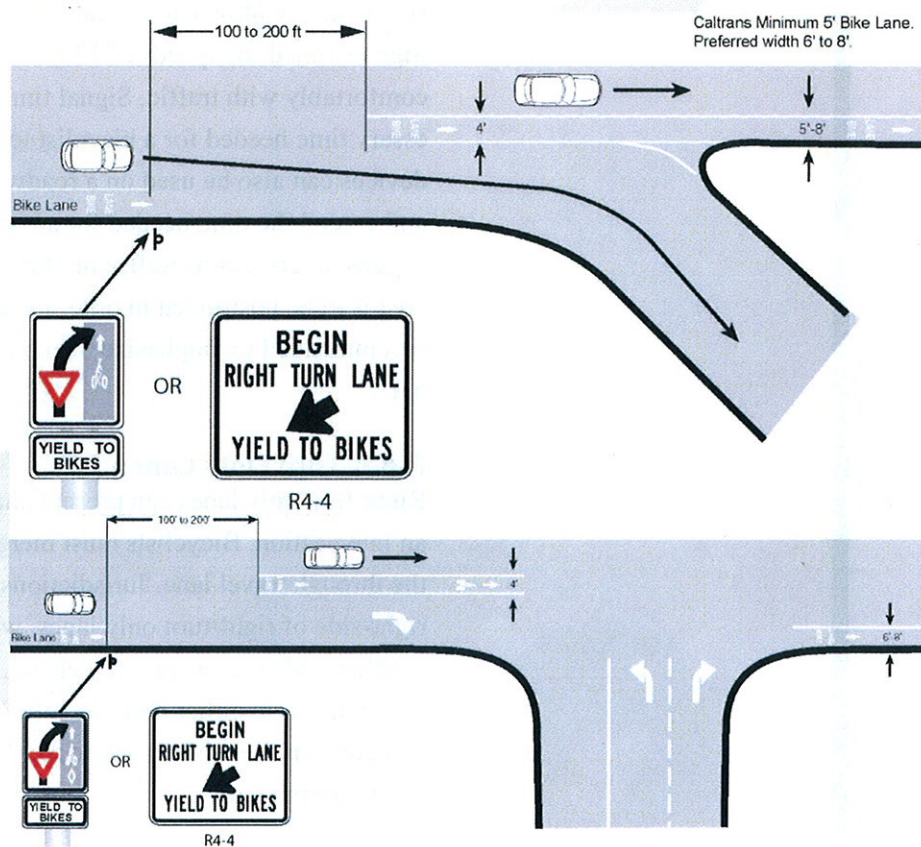






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- The bicycle merge should begin 250 feet in advance of the freeway on-ramp.
- Appropriate signage and striping should be used to warn bicyclists and motorists of the merge.
- Bicycle improvements to freeway ramps



### At-Grade Railroad Crossings

TOWN OF LOOMIS has at-grade railroad crossings for existing and proposed bikeways. If bicyclists do not ride at a 90 degree angle over the tracks, bicyclists' wheels can catch in the tracks and potentially lead to a collision.

### Class III Bikeway Design

Generally referred to as a "bike route," a Class III bikeway provides routes through areas not served by Class I or II facilities or to connect discontinuous segments of a bikeway. Class III facilities can be shared with either motorists on roadways or pedestrians on a sidewalk (not advisable) and is iden-







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tified only by signing. There are no recommended minimum widths for Class III facilities, but when encouraging bicyclists to travel along selected routes, traffic speed and volume, parking, traffic control devices, and surface quality should be acceptable for bicycle travel.

Although it is not a requirement, a wide outside traffic lane (14 feet) is typically preferable to enable cars to safely pass bicyclists without crossing the centerline. Caltrans Chapter 1000 provides details regarding the design requirements for placement and spacing of bicycle route signage.

### **On-Street Regulatory & Warning Bike Signs**

Signage for on-street bikeways includes standard BIKE LANE and BIKE ROUTE signage, as well as supplemental signage such as SHARE THE ROAD and warning signage for constrained bike lane conditions. Signage should be installed on existing signposts if possible, reducing visual clutter along the path or roadway.

### **Shared Roadway Bicycle Marking**

Recently, Shared Lane Marking stencils have been introduced for use in California as an additional treatment for Class III facilities. The stencil can serve a number of purposes, such as making motorists aware of bicycles potentially in their lane, showing bicyclists the direction of travel, and, with proper placement, reminding bicyclists to bike further from parked cars to prevent “dooring” collisions.

### **Bike Route Signage**

In addition to wayfinding signs, bike route network signage that uses the CAMUTCD standard for should be used by local jurisdictions. Route numbering for these signs should be coordinated with neighboring jurisdictions where bikeways cross borders. Most commonly, they show the route number and the corresponding direction.

For bike route signs, CAMUTCD requires a green background and white lettering. The top portion of the sign is customizable for the Town or region where it located. For example, the Town of San Francisco shows the Golden Gate Bridge on its bike route signs shows an example from San Francisco.

### **Multi-Use Path Signs**

Local jurisdictions should work together to create a sign system for the







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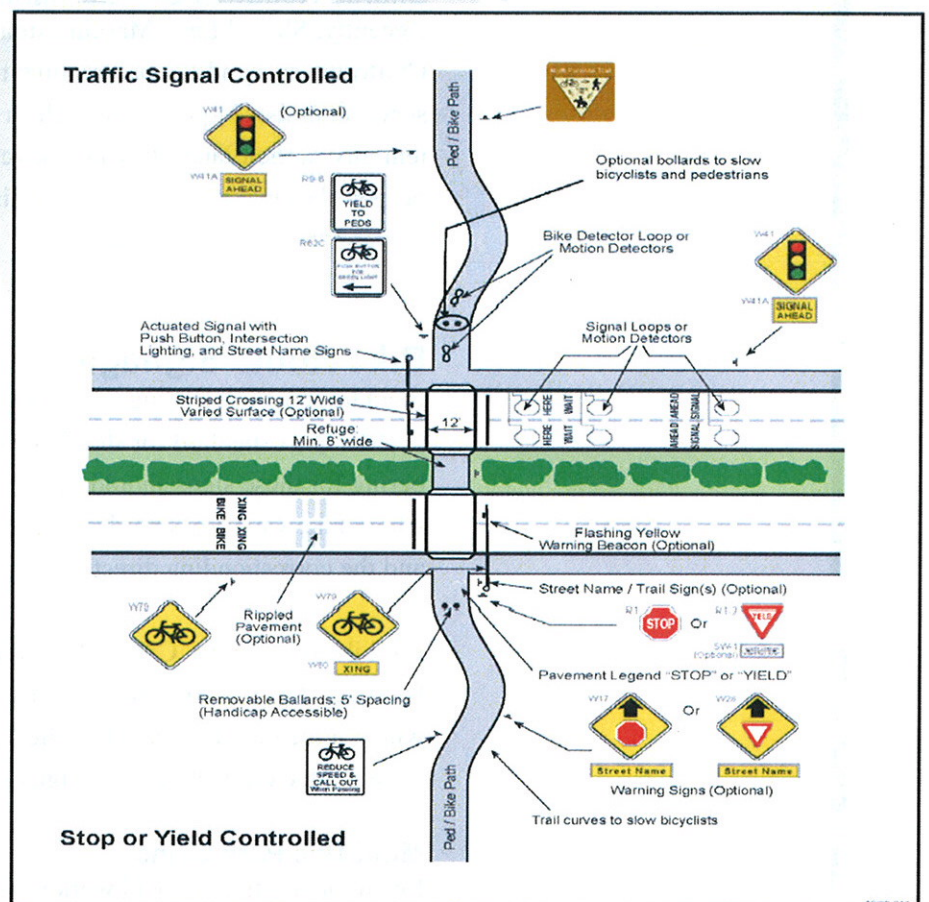
multi-use path network. It is an expanding network that could link with many destinations countywide. Signs could show destinations as well as proper traffic control. These signs could be coordinated with other on-street bicycle route signage. This system should encourage use of trails for recreational as well as functional bicycling trip-purposes. Helping bicyclists of all ages reach destinations easily.

### Wrong-Way Signs

The local jurisdictions may want to consider additional signage on bikeways with high levels of wrong-way riding. The Town of Sunnyvale, places wrong way riding signs on the back of bike lane signs to help prevent bicyclists using bicycle lanes in the wrong direction, riding against traffic.

### Parallel Path Warning Signage

When paths are located parallel and adjacent to roadways, vehicles turning into and out of streets and driveways must cross the path. Conflicts between bicyclists and pedestrians and turning motorists are common at these





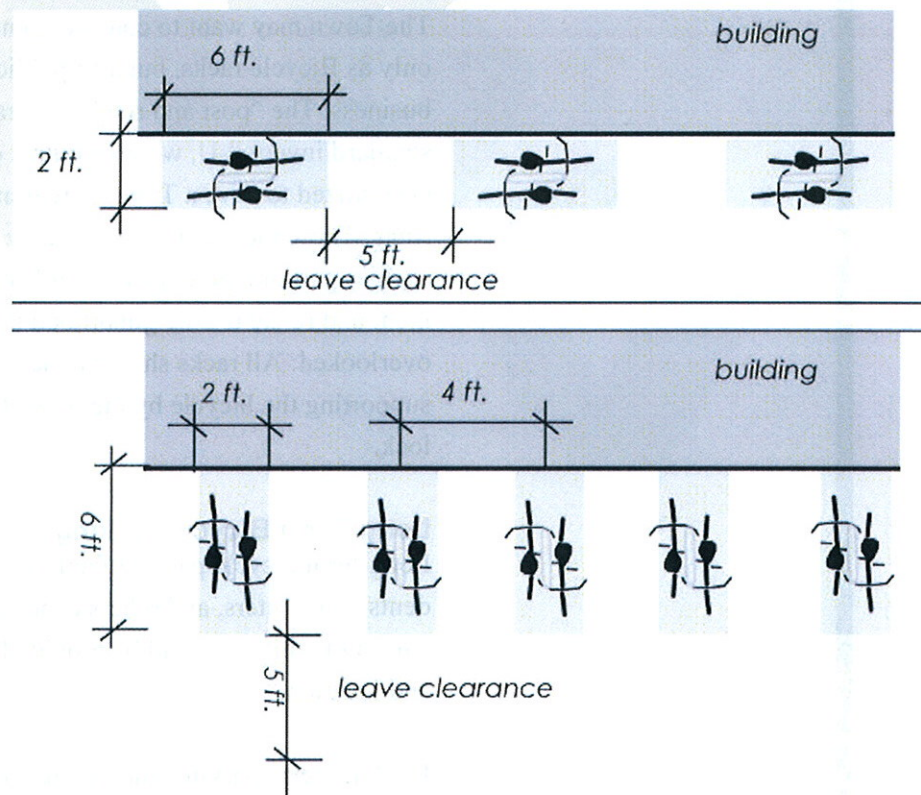


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types of intersections. Turning motor vehicles do not expect to see bicyclists or pedestrians coming in the opposite direction of traffic. Starting in the early 1990's, the Town of Denver, Colorado began using experimental warning signage at its parallel paths. The signage is modified from the standard MUTCD railroad warning signage. Experimental signage, similar to the Denver parallel path warning signs, could help alert motorists to the presence of bicyclists and pedestrians on parallel paths.

### Short Term Bicycle Parking

Short term bicycle parking facilities are best used to accommodate visitors, customers, messengers and others expected to depart within two hours. Bicycle racks provide support for the bicycle but do not have locking mechanisms. Racks are relatively low-cost devices that typically hold between two and eight bicycles, allow bicyclists to securely lock their frames and wheels, are secured to the ground, and are located in highly visible areas. They are usually located at schools, commercial locations, and activity centers such as parks, libraries, retail locations, and civic centers.







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### **Bike Rack Guidelines**

Bicycle racks should be installed with the following guidelines in mind:

- The rack element (part of the rack that supports the bike) should keep the bike upright, supporting the frame in two places and allowing one or both wheels to be secured.
- Install racks so there is enough room between adjacent parked bicycles. If it becomes too difficult for a bicyclist to easily lock their bicycle, they may park elsewhere. A row of inverted “U” racks should be installed with 15 inches minimum between racks.
- Empty racks should not pose a tripping hazard for visually impaired pedestrians. Position racks out of the walkway’s clear zone. When possible, racks should be in a covered area protected from the elements.
- Long-term parking should always be protected.
- Generally, ‘U’ type racks bolted into the sidewalk are preferred and should be located intermittently or in front of key destinations.
- Bicycle racks should be installed to meet ADA standards and not block pedestrian through traffic.

The Town may want to consider / encourage custom racks that can serve not only as Bicycle racks, but also public artwork, or as advertising for a specific business. The “post and ring” style rack is an attractive alternative to the standard inverted-U, which requires only a single mounting point and can be customized to have a Town or region name or emblem stamped into the rings. These racks can also be easily retrofitted onto existing street posts, such as parking meter posts. While custom racks can add a decorative element and relate to a neighborhood theme, the rack function should not be overlooked: All racks should adhere to the basic functional requirement of supporting the bicycle by the frame (not only the wheel) and accepting a U-lock.

### **Long Term Bicycle Parking**

Long-term bicycle parking facilities accommodate employees, students, residents, commuters, and others expected to park more than two hours. These parking facilities should be provided in a secure, weather protected manner and location.

For long-term parking, the Town may want to consider / encourage bicycle lockers. Bicyclists are usually more comfortable storing bicycles in lockers







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for long periods because they offer increased security and protection from natural elements. Although they may be more expensive to install, they can make the difference for commuters deciding whether or not to bicycle. The park and ride lot located on the east side of the Horseshoe Bar Road interchange and the park and ride / bus transfer lot at the rail station are excellent opportunities to located long term bike parking facilities.

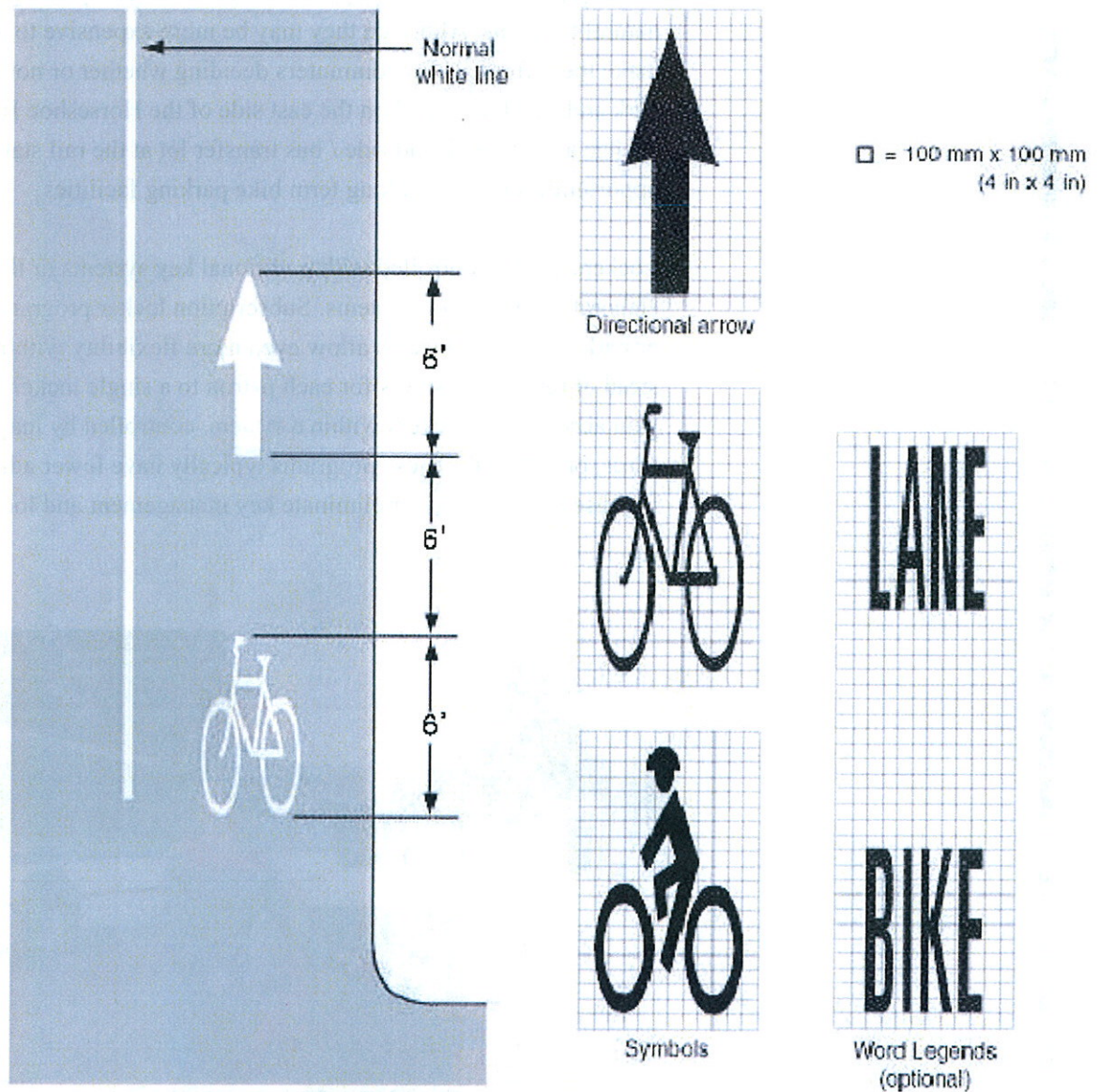
Lockers can be controlled with traditional key systems or through more elaborate subscription systems. Subscription locker programs, like e-lockers, or park-by-phone systems allow even more flexibility within locker use. Instead of restricting access for each patron to a single locker, subscribers can gain access to all lockers within a system, controlled by magnetic access cards, or caller ID. These programs typically have fewer administrative costs because they simplify or eliminate key management and locker assignment.







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**TYPICAL BIKE LANE PAVEMENT DELINEATION  
(ON 2-LANE OR MULTI-LANE ROADWAYS)**  
SOURCE: CALIFORNIA MUTCD, FIGURE 8C-6

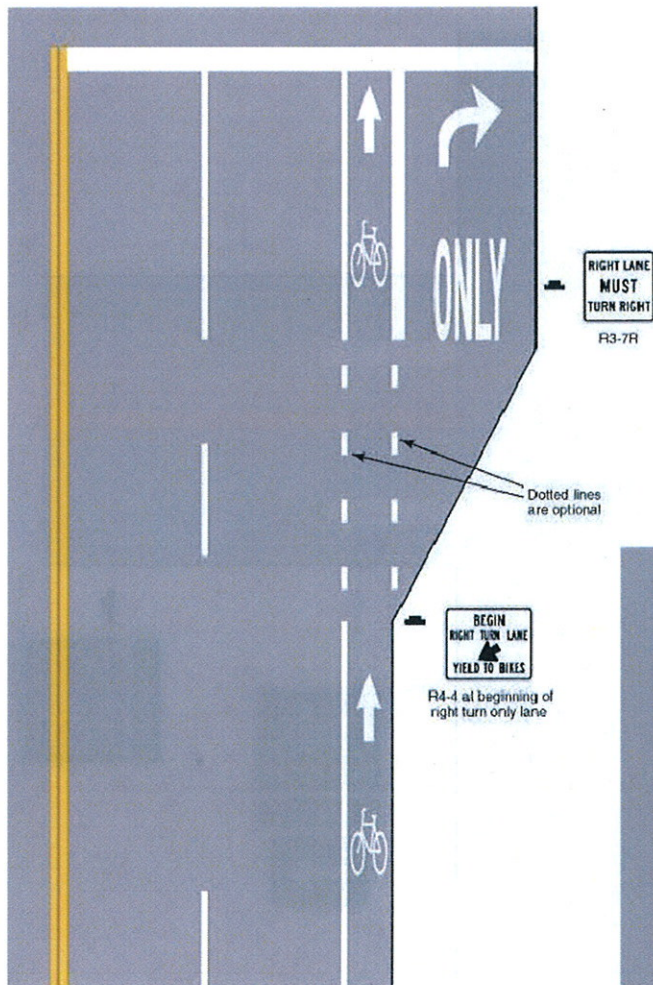
## CLASS 2 BIKEWAY MARKING DIMENSIONS



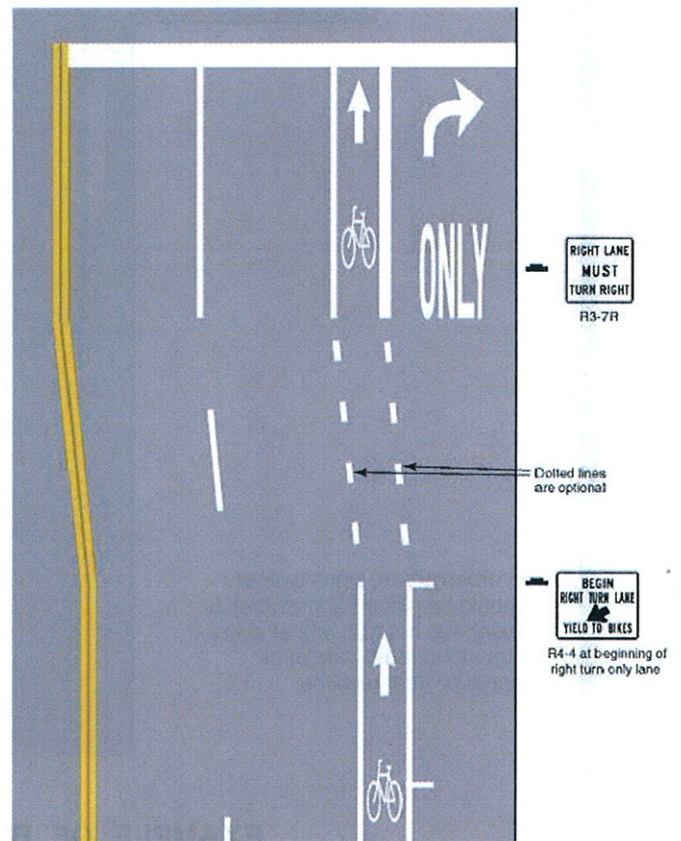




## Appendix B



**TYPICAL BICYCLE LANE TREATMENT  
AT A RIGHT TURN ONLY LANE  
(ON 2-LANE OR MULTI-LANE ROADWAYS)**  
SOURCE: CALIFORNIA MUTCD, FIGURE 9C-3



**TYPICAL BICYCLE LANE END TREATMENT AT  
PARKING LANE INTO RIGHT TURN ONLY LANE  
(ON 2-LANE OR MULTI-LANE ROADWAYS)**  
SOURCE: CALIFORNIA MUTCD, FIGURE 9C-4

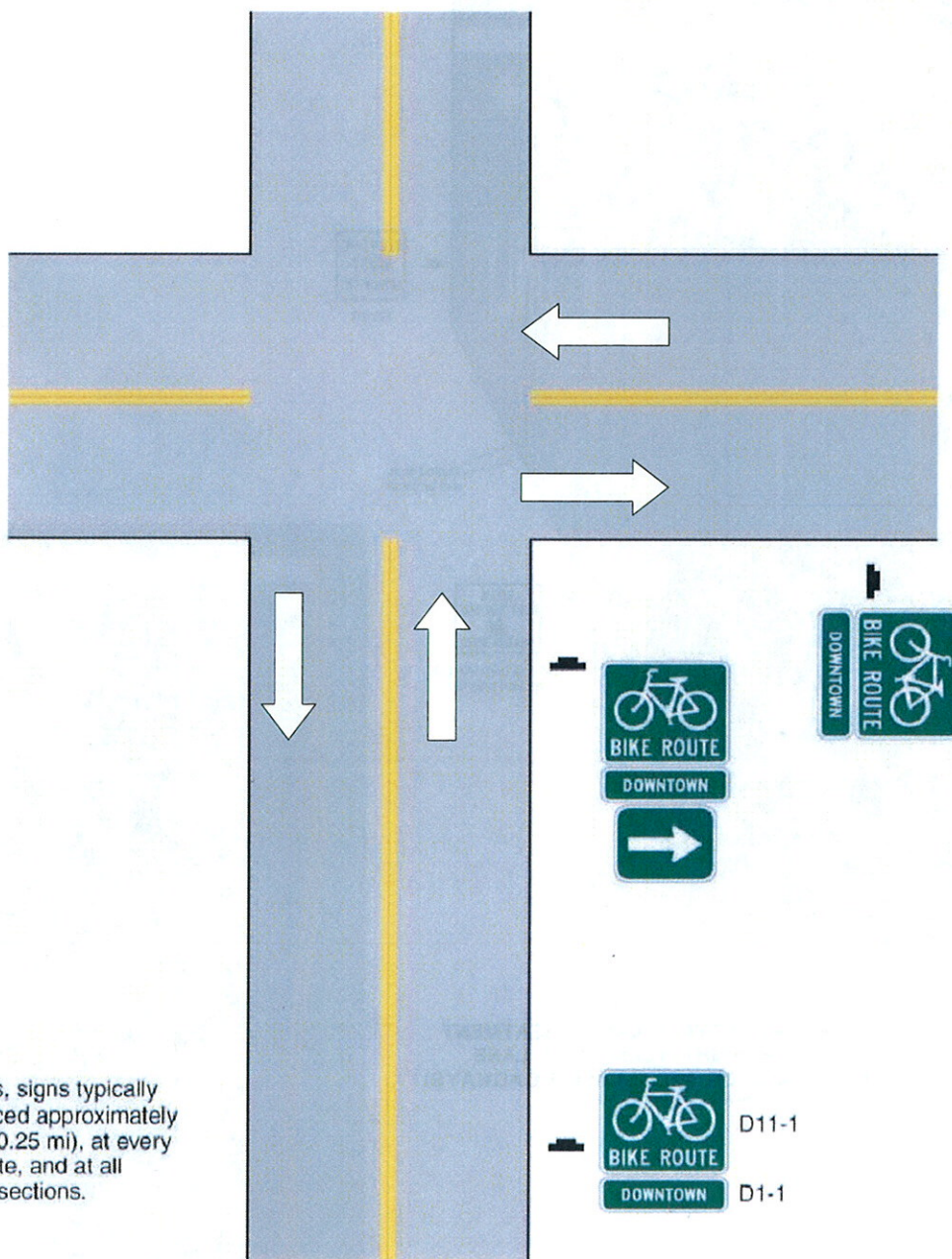
## CLASS 2 BIKEWAY MARKINGS LOCATIONS







## Appendix B



In urban areas, signs typically should be placed approximately every 400 m (0.25 mi), at every turn in the route, and at all signalized intersections.

### EXAMPLE OF BIKE ROUTE SIGNING

SOURCE: CALIFORNIA MUTCD FIGURE 9B-6

## CLASS 3 BIKEWAY SIGNAGE LOCATIONS







# Appendix C

## COMMUNITY PARTICIPATION

The following are questions and comments received during the Public meetings and from the survey. For complete surveys, contact the Town of Loomis Engineering Department.

### Resident Responses:

- Development of trails should utilize existing trees and boulders that provide town character (5)
- Trees can be removed and replanted, rocks can be removed and repositioned to accommodate the needs of building and improving for the master plan. We are here to have dominion over our resources.
- Host community education for safe cycling, and driver education so everyone can commute safely. (2)
- Focus first on utility cycling (commuting, biking to school etc.) and recreational cycling will follow (3)
- Can we legitimize pre-existing trails like the ones by the train tracks? (2)
- Trails for horses should be kept away from commercial areas/downtown, because of smell issues etc. (3)
- Would like to see eventual equestrian connection from Loomis Basin Park to downtown.
- It would be nice to go West to connect to Rocklin - King road area to Park Rd area of Rocklin.
- I'd like to see better shoulders and better markings on streets, also paved and unpaved trails for bikes.
- Horses need their own trails. Share the road signs! How to connect horse trails to north and south side? Can we have trail heads that accommodate horse trailers?





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- If dogs are being walked on trails they must be on a leash.
- Use trails to connect to other local trail systems (Placer's) as well as nearby recreation (Folsom Lake etc.) (3)
- Try to have bike routes and trails connect to local shopping and commercial areas like downtown, Rocklin, etc. as well as having connectivity to neighborhoods in our community. (2)
- Can you mark class 3 routes with signage? There are signs that look something like this too (respondent drew a sign indicating that bikes yield to horses and horses yield to pedestrians)
- How [do you plan to] deal with areas where roads are necessarily narrow - e.g. road cuts next to road, oak trees next to road, ditches for drainage?
- We should use progressive towns and cities like Davis and Portland as [examples].
- Do we have funding? How do other communities fund their plans?
- Contact local school principals, PTC etc. to participate in safe routes to schools.
- Shade is crucial. Should fit with Dry Creek Greenway Plan. Why reinvent the wheel? Did Rocklin follow Dry Creek Greenway?
- Bike routes - 3' [minimum] ride space, multi use trails to better benefit more than one or two users. (Best for cost and use) Establish connection to CIP projects to assure improvements are completed as part of the CIP funds.
- I'm mostly interested in seeing natural walking trails in Town. Again, don't neglect Antelope Creek corridor in favor of dwelling on Secret Ravine. I don't consider concrete sidewalks [trails] However, they should be incorporated into the trails as connectors between real trails.







## Appendix C

However, sidewalks should almost never be built on both sides of a road - not necessary.

- As part of trails, consider wildlife corridors as one of the needs to plan for - e.g. for some of Dry Creek Greenway corridors where can't get easements for people.
- Are PCWA canal trails available to public? Where? Trails along Heritage Park?
- Loomis talks the talk, but doesn't walk the walk. Lots of lip service has been paid to protecting open space but we haven't invested in it. I'm skeptical this will ever happen. Sometimes too general in scope. I hope to see more specifics in the future. Funding opportunities weren't discussed enough.
- The Loomis Basin Horseman's Association has a great deal of information on trails all over the Loomis Basin, they can be contacted at: [lbha@garlic.com](mailto:lbha@garlic.com) Btw, "Loomis Basin Equestrian Center" is a private business, coincidentally located adjacent to the Loomis Basin County Community Park on King Rd. (not affiliated with the LBHA)

### Non-Resident Responses:

- Mark routes with destination, mileage, maps etc. (2)
- Trails do not have to be single use, they can be shared by all, bikers, equestrians etc. (2)
- Equestrian and Bikeway should be kept separate. Example: Taylor Ranch in Penryn is dedicated equestrian/pedestrian, [is] well used by both groups (no dogs, no bikes).
- Pursue all possible sources for funding: Safe Routes to Schools, Rails to Trails etc. (3)
- Encourage biking/walking to school/work by having town events, and trying to foster an atmosphere that encourages this. (2)





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- Make a very strong proactive commitment to work with neighboring communities to coordinate design and location and concepts Use volunteers. Be creative and proactive.
- Approach landowners and ask for easements. Involve schools, PTAs, Highway Patrol, equestrian groups.
- City of Roseville just received Bicycle Friendly Community status from League of American Bicyclists. Perhaps use their checklist to get Loomis as “bike friendly” as possible. Car parking along Taylor near schools - should make motorists aware that bikes may be passing (signs?).
- Keep roads small with low traffic speeds (Road Diets). Don’t allow large “parkways” with high speeds! Wider roads mean higher speeds.
- Show equestrian facilities: Taylor Ranch, LBHA arena at Loomis Park, Sterling Point.
- Multi-use natural surface trails can be narrow. Many multi-use trails are less than 4’.
- Consider the youth of the community. These kids will probably be thrilled to ride a dirt path.
- Whenever possible develop bike and multipurpose trails at the same time and be creative on how to do so. Involve PCWA and trails along canals. Be opportunistic, if a development is not appropriate location for trails, require money or dedication as condition - there’s plenty of legal nexus. Identify, evaluate and try to formalize “use” trails.
- #1 is to improve Taylor Road to Class 2. You are aware of the nasty section between Sierra College and the Rocklin city limit. Obviously, Rocklin has to be coaxed into helping with this. I think it could be done fairly inexpensively, since it would probably be temporary anyway. Grade it, compact it, maybe put down some AC grindings, and place 2” of AC. There is also the east bound section of Taylor east of Del Oro that has no shoulder. King from freeway to Sierra College - Class 2. Forget the







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hokie bike lane that exists in some areas. King from freeway to town limit/Auburn Folsom, Class 3. Del mar - Class 3, Brace - Class 3, Horse-shoe Bar from freeway to Auburn Folsom - Class 3 (the rest of HS Bar Class 2), Val Verde - Class 2 or 3, Barton needs to be widened and made class 3. Pretty scary to ride this road in a lot of areas.

DRAFT



*Prepared by*



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